The Abstinence Violation Effect In Chemical Misusers

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ABSTRACT

Addictive behaviour treatment programmes, in particular the Relapse Prevention (RP) model of the relapse process is described and critically analysed in this work. A key RP construct, the Abstinence Violation Effect (AVE), is examined in relation to the chemical misusers behaviours during a return to drug use after a period of voluntary abstinence. A reformulation of the AVE is presented together with a discussion of the empirical support for this construct.

Twelve subjects, seven female and five male chemical users, were assessed using the Differential Emotions Scale (Izard, Doughty, Bloxom, & Kotsch, 1974) and the Four Attributional Dimension Scale (Benson, 1989) at four different points (background factors, high risk situations, lapse, relapse), while they listened to an audiotaped recording of a description of their most typical lapse/relapse scenario.

Ten subjects experienced the AVE at the point of relapse and eleven as the result of a lapse. There was a significant increase in negative affect at the high risk situation (HRS), lapse and relapse points, with decreases in positive affect over the relapse process. There were significant increases in the negative emotions sadness and hostility between points one and two in the relapse process, with trends in this direction for the other emotions guilt, fear, disgust and anger. Conversely, significantly lower scores were exhibited between points one and two for the emotions joy and surprise. There were no significant differences on any of the four attributional dimensions across the relapse process.

Females reported significantly higher scores for joy and significantly lower scores on the negative emotions contempt, hostility, fear, shame, and shyness, with

the other emotions showing no significant differences between the genders. Females also reported significantly lower scores than males on locus, stability and globality.

The significance of these results are discussed, along with suggestions to improve the relapse prevention approach in line with the results presented in this thesis.

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Chapter One
Introduction

Chemical misuse and addiction has been subjected to varying degrees of public criticism over the years. The 1800's saw the casual use of opiates and other drugs by a wide range of people, including people such as Sigmund Freud (Jones, 1953). These drugs were not considered dangerous; indeed, to the contrary, they were considered very good at improving mood and were said to increase a persons perception and motivation (Harding 1988). In the early part of this century there was the attempt to ban many drugs, including alcohol (Sinclair, 1962), with the climax of this evolving into an attempt at prohibition, which unfortuantly created more problems than bargained for, with the Mafia establishing a strong influence in America as a result of alcohol prohibition(Cashman, 1981). These changes have influenced how professionals view chemical misuse.

The first approach to the study and treatment of addiction began with the moral approach to the problem (Beck 1811), where the addictive behaviour exhibited by the person is seen as a flaw in the moral makeup of that individual. Following on from this approach came the medical model of addiction. This approach adopted the view that addiction is a disease and as such can be cured in the same manner as other diseases, namely by following the advice of a specialist in that area (Rosenhan and Seligman 1984). Its main advantage over the moral model was in absolving the person from the responsibility for the problem; it was not their fault that they had the disease of addiction. As a disease it could be cured by following the advice of the doctor; however, some of their treatment techniques, such as

electroconvulsive treatment were somewhat questionable. Many of the self-help groups that have developed as a result of following the format of alcoholics anonymous (AA) and their twelve step programme, have as their belief that addiction is a disease. However, these groups also have a strong belief in a higher power, so they would fall into the enlightenment model rather than the disease model of addiction (Ward 1992). Now the view of addiction is again undergoing some intense scrutiny with a new approach developing, mainly as a result of the high rate of returning to chemical use by the individual after a period of abstinence from drugs. The evidence collected so far would indicate that there has been a problem in the way that people have been treated, as up to 80 percent of people will relapse within 90 days after completing a treatment programme (Marlatt, Curry and Gordon, 1988). These figures are alarmingly high, and as such are a concern for the people working in the treatment facilities based on the disease model of addiction.

Over the last decade Relapse Prevention (RP) has emerged as an innovative approach both to the conceptualisation and treatment of addictive disorders with Marlatt and his colleagues (Marlatt, 1985a, 1985b; Marlatt, Baer, Donovan, & Kilvlahan, 1988; Marlatt, Curry, & Gordon, 1988; Marlatt & Gordon, 1991) producing an important body of work that has contributed to the understanding of the processes underlying relapse.

RP procedures aim to enhance the person's self-management skills in order to maintain the initial behaviour change induced by therapy (Ward, 1992). Marlatt's conceptualisation has proven remarkably valuable in the addictions field, particularly his observation of communalities across addictive disorders; the presence of short term satisfaction, delayed negative consequences, the probability of high personal and social costs and difficulty

in maintaining behaviour change. In the RP model a distinction is made between an initial loss of control or lapse, and a relapse: a return to problematic levels of addiction or prohibited behaviour. It is hypothesised by Marlatt that intervening between the lapse and relapse is a process called the Abstinence Violation Effect (AVE). A causal search and attribution for the cause or reason for the lapse, and the affective reaction to this attribution, are included in this. How a person views this initial lapse is indicative of their ability to successfully resume compliance with their restraint or abstinent rules.

The AVE is a core component of the relapse process and research into the cognitive and affective processes underlying it is both clinically and theoretically important. There has been one piece of empirical research carried out on the AVE in chemical abusers (Birke, Edelman, and Davis, 1990) and only a little in the general addictions area. The work that has been done has relied upon Marlatt's formulation, but there are a number of difficulties with his version of the AVE, which has limited the quality of the research into its components. In this thesis I will present a reformulation of the AVE (Ward,1992) that avoids these problems and which may lead to more fruitful research possibilities, as well as the relevant data to support the reformulation. Firstly, I will discuss the development of the addictions field, focusing on the RP approach and the AVE in particular, with some suggestions to improve the RP model included.

Chapter Two
Addictive Behaviours: an Overview

Addictive behaviours are viewed as representing a category of bad habits, including behaviours such as problem drinking (Elvy, 1985) , substance abuse (Whitney, 1992), overeating (Kales, 1990), compulsive gambling (Dickerson, 1984) and others. Addictive behaviours are seen as nothing more than overlearned habits that can be analysed and modified in the same manner as other habits. These behaviours are presumed to lie along a continuum of use rather than being defined in terms of fixed categories, excessive use or total abstinence. All points along this continuum of frequency of occurrence, from very infrequent, to normal, to excessive use are presumed to be governed by similar processes of learning. Addictive behaviour is characterised as the presence of short term satisfaction, delayed negative consequences, the probability of high personal and social costs, and difficulties maintaining behaviour change (Daley, 1989). It is a behavioural pattern of compulsive use of a substance or behaviour, characterised by an overwhelming involvement with the use of the substance, the securing of its supply, and the high tendency to relapse after abstinence (Warburton, 1992). However this has not always been the view held by those people working in the addictions field, and indeed the discipline has undergone considerable change as a result of the research into the theories and treatment programmes offered to sufferers from chemical misuse.

Theories of Addiction

The study of addiction has been influenced by various theories over

the years, beginning with the moral model of addiction which focused on the addict as a person who lacked the moral fibre to resist temptation, being unable to exercise control over their behaviour. The emphasis of this model was found to focus on the strength of the addict's "willpower" (or lack of moral strength), having its basic philosophy founded on the moral commandments found in christian doctrine "Thou shalt not.....". Baer and Marlatt, (1991) have shown that this model has not recieved much support in the addictions literature.

The next theory to be postulated was the disease model of addiction (Jellinek 1960), which claimed that addictive behaviours were based on an underlying physical dependency, focusing attention on the physiological predisposing factors, supposedly genetically transmitted as the underlying cause of the addiction. The disease model assumes that the person cannot voluntarily control their drug- taking behaviour due to the overpowering influence of internal physiological forces such as compulsions, craving, or irresistible urges.

This model offered a number of advantages over the moral model of addiction. The disease model attempted to remove the moral stigma associated with addictive behaviour, even encouraging people to seek treatment for their disorder, whereas the moral model focused on the addict as a person who lacked the moral fibre to resist temptation. Through seeing their problem as a disease and not a problem of moral guilt the sufferer was absolved from personal responsibility for their addiction. The disease model has found great support with self help groups such as Alcoholics Anonymous, Narcotics Anonymous and other twelve step programmes. There is however a major paradox in the disease model of addiction, that

being the concept of control and how it is defined within the model. Although the disease model assumes that the person is unable to control their addictive behaviour due to the compelling influence of internal physiological factors said to underlie the disorder, they are told that the only way to curb their problem behaviour is to maintain total abstinence for an indefinite period. The person must exercise control while maintaining total abstinence from their addictive behaviour, for to loose control is to relapse. A dichotomous restriction is produced on the possible range of treatment outcomes produced by the disease model: one is either abstinent (exercising control) or relapsed (losing control). So even though the aetiology of the behaviour is described as a disease process which is beyond the control or responsibility of the person, the major treatment mode again takes the form of a moral commandment: " Thou shalt not indulge in alcohol or other mind altering chemicals ever again".

Behavioural Models

A third approach that has emerged as an alternative to the moral and disease models of addiction arose out of the behavioural tradition. Addiction is defined as a powerful habit pattern (Atkinson, Atkinson and Hilgard 1983), an acquired vicious cycle of self-destructive behaviour that is locked in by the collective effects of classical conditioning (acquired tolerance mediated in part by classically conditioned compensatory responses to the deleterious effects of the addictive substance) and reinforcement (both the positive reinforcement of the high of the drug rush and the negative reinforcement associated with drug use as a means of escaping or avoiding dysphoric physical and/or mental states - including those associated with the negative

after-effects of prior drug use). According to this view a person who acquires an addictive habit is no more to be held responsible for their behaviour than one of Pavlov's dogs would be held responsible for salivating at the sound of a ringing bell. Human drug use is not only determined by classical and operant conditioning factors, but also to a large extent by acquired expectations and beliefs about drugs as an antidote to stress and anxiety. Also exerting a strong influence are social learning and modelling factors (drug use in the family and peer environment, along with the pervasive portrayal of drug use in advertising and the media). The three most influential behavioural theories of relapse in the addictions field are the withdrawal, compensatory, and appetitive models (Niaura, Rohsenow, Blinkoff, Monti, Pedraza et al, 1988).

The Conditioned Withdrawal Model

The conditioned withdrawal model of relapse puts forward the notion that whenever the person experiences environmental or internal cues that have been associated with drug effects or withdrawal, they will experience a conditioned response resembling the withdrawal state (Wiker, 1980). The cues or conditioned stimuli eliciting these symptoms may include drugs similar to those abused or mood states associated with drug taking. This may lead on to increased drug seeking behaviour to eradicate these unpleasant symptoms, and eventually lead to a relapse.

The Conditioned Compensatory Response Relapse Model

Siegal (1983) developed the conditioned compensatory response relapse model as a way to explain the development of drug tolerance. The view

expressed here is that the environmental cues or stimuli that are repeatedly associated with drug use become conditioned stimuli and will evoke a conditioned response. A key assumption here is that the conditioned responses are opposite in direction to the unconditioned responses or direct pharmacological action of the drug. This is thought to compensate for the anticipated drug effects which maintains a homeostatic balance. The drug-seeking behaviour may be motivated by the attempt to avoid or escape the conditioned responses, therefore increasing the chances of a relapse.

The Conditioned Appetitive Theory

The third approach to relapse is the conditioned appetitive theory (Stewart, deWit, & Eikelboom, 1984). Here the positive incentive value of drugs plays the major role in substance abuse and drug taking is thought to be maintained by appetitive motivational processes rather than by the desire to escape or avoid withdrawal symptoms. As a result of the conditioning the stimuli come to elicit a positive motivational state similar to that created directly by the drug in question. This positive motivational state is characterised by increases in drug related thoughts and craving, and drug seeking behaviour. Withdrawal symptoms are believed to be conditioned stimuli that elicit positive affect rather than conditioned responses.

Self - Control Model of Addiction

Because a behavioural problem can be described as a learned habit pattern it does not imply that the person is to be held responsible for the acquisition of the habit, nor that the person is capable of exerting voluntary

control over the behaviour. However, even though the person's particular habit has been shaped and determined by past learning experience (for which they are not to be held responsible), the process of changing habits does involve the active participation and responsibility of the person involved. With involvement in a self management programme, where the person acquires new skills and cognitive strategies, habits can be transformed into behaviours that are under the regulation of higher mental processes involving awareness and responsibility in decision making. As the person undergoes a process of deconditioning, cognitive restructuring and skill acquisition, they can begin to accept greater responsibility for changing their behaviour.

This is the essence of the self-control or self-management approach to addiction: the person can learn how to escape from the vicious cycle of addiction, regardless of how the habit pattern was originally acquired. People can learn effective methods of habit change, whether the goal is abstention or moderation, regardless of how the problem initially developed (Marlatt & Gordon, 1985). The person moves from a position of being the patient under the direction of the therapist to a position where the person becomes more able to assume responsibility for the process of change. The self-control model favours a more individualised selection of treatment goals ranging from abstinence to controlled or moderate use. It attempts to create a sense of detachment between the problem behaviour and the person's identity or self-concept. This detachment facilitates an objective, nonevaluative approach to treatment where the client is trained to become their own personal scientist - therapist using objective observation of the target behaviour as the focus to work with in treatment. Emphasising social learning principles as the basis for the modification of problem behaviour

indicates the educational approach of the self-control model. The treatment is a combination of behavioural coping skills, cognitive restructuring techniques (including cognitive coping skills) and lifestyle-change procedures. It is assumed the person eventually will perform the newly acquired skills and attitudes without the assistance of external aids such as the continued availability of the therapist, or some other support group, for example Narcotics Anonymous (N.A.). As addictive behaviour problems are assumed to be acquired on the basis of learning maladaptive behaviour patterns, self control treatment focuses on replacing these negative behaviours with positive behaviours and attitudes. However, the treatment programmes that are associated with the various models of addiction have produced significant data to suggest that there are problems in relation to the rates that clients return to their addictive behaviours or relapse. The most typical result of treatment programmes is that 20 percent of people greatly improve, 60 percent are somewhat improved, and 20 percent are not improved at all (Rosenhan and Seligman 1984). Other studies report that up to 80 percent of people will relapse within 6 months of completing treatment (Miller and Heather 1988).

Relapse Process

In Marlatt Curry and Gordon's (1988) research subjects relapsed within a short time period after the completion of their respective treatment programmes (the opportunity for lapsing increases at the termination of treatment regardless of the initial quitting date). It was found that the average number of days between beginning abstinence (for smokers) or completing the treatment programme (for heroin addicts and alcoholics) and

the subsequent date of initial drug use was 17 days for the smokers, 30 days for the alcoholics, and 32 days for the heroin addicts. In an earlier study (Marlatt, 1973) that actually documented the process of relapse itself, Marlatt found that during the first 90 days of the follow up period for his subjects, 48 of the 65 people involved consumed at least one alcoholic drink. Although his patients had made initial behaviour changes in treatment, they had not been able to sustain them. This was viewed as a major problem, so very detailed descriptions of the relapse episodes were obtained from the patients during the follow-up interviews, and an attempt was made to determine the exact circumstances of the situations associated with the first lapse (drink episode). Information including the physical location, time of day, presence or absence of others, beverage consumed, a description of any external (environmental) or internal (subjective) events occurring in that general time period, plus the patient's feelings and emotions on the day of the lapse. Marlatt found that all of the relapse episodes could be assigned to a relatively small number of categories. The first two categories, frustration/anger and social pressure, accounting for over half the cases, involved an interpersonal encounter. Twenty nine percent of the lapses involved an episode where the patient was frustrated in some goal-directed activity, and they reported feelings of anger. In the second category 23 percent lapsed as a result of being unable to resist either the direct or indirect attempts by others to engage them in drinking (social pressure). Marlatt and Gordon, (1980) analysed 137 relapse episodes drawn from three samples: alcoholics, heroin addicts and cigarette smokers, all of whom were followed up after participation in abstinence oriented treatment programmes. In a second report Cummings, Gordon, and Marlatt (1980) expanded this first sample by adding 174 more

relapse episodes (n=311). Using the basic principles of content analysis (Kiesler, 1973) a set of categories was established, with interrater agreement for category assignment of 88 percent.

The first major category is interpersonal - environmental determinants - and is used whenever the relapse episode involves a response to primarily intrapersonal forces, either psychological or physical in nature, or to an environmental event that does not primarily involve other people. The emphasis is on precipitating events in which another person, or group of people, is not mentioned as a significant factor. The second major category, interpersonal determinants, applies whenever the relapse episode involves the significant influence of other people, for example an argument with spouse or social pressure such as (a party). To resolve any difficulty in distinguishing clearly between the interpersonal and intrapersonal categories, an episode is assigned to the interpersonal category only if the person describing the incident reported that another person or persons exerted a significant influence either prior to the lapse (e.g. criticism from earlier in the day), or at the same time the lapse occurred (other people in the house using drugs). Just being in the presence of others at the time of the lapse episode does not imply that the episode is assigned to the interpersonal category unless it is reported that these people exerted a significant influence. Similarly, an event is not assigned to the intrapersonal category just because the person was alone at the time of the lapse, as they may still be responding primarily to an interpersonal situation that has occurred in the relatively recent past (e.g. recent loss of spouse). 35 percent of all lapses occurred in the intrapersonal negative emotional states category, with 16 percent occurring in the interpersonal conflict category. In the interpersonal category 82 percent of

the relapse episodes involved coping with frustration and anger; the results being reversed in the intrapersonal category, where emotional states other than frustration and anger accounted for 85 percent of the lapses. From these results it was suggested that frustration and anger associated with lapses stem primarily from interpersonal sources (arguments) whereas other negative emotional states (fear, depression etc) seem to predominate as determinates of lapses when significant other people are not involved.

Marlatt discovered that interpersonal situations involving frustration and anger accounted for 16 percent of lapses in opiate addiction. Social pressure on the person also accounted for a large number of lapses at 20 percent. There were two types of social pressure found: situations where some form of direct social pressure (verbal persuasion or avoiding direct social access to a drug with pressure on the person to partake) was involved; or where the mere presence of other people engaging in the behaviour act as a kind of indirect pressure mediated by a social modelling effect. For heroin addicts direct social pressure, with actual contact between users, was the predominant determinant of a lapse. Due to the illegal nature of heroin addiction, the settings for a lapse were much more limited than alcohol or smokers. The setting for a lapse with heroin addicts often occurring in a private home as the drug is obtained primarily in one of two ways; by purchasing from a sought-after connection or obtained without cost from friends or other users. This is in contrast to Burt's (1974) findings with alcoholics, which showed that around 80 percent of his sample population (30 males and 4 females) had their first lapse in a location that differed from their preferred drinking settings prior to treatment. Lapses often occur when the person is emotionally upset, feeling angry, sad, anxious, bored, depressed or

guilty. They can also occur when the person is feeling good instead of bad, although relatively few lapses occur in this category. Testing personal control is another reason that some people may use as an excuse to lapse, but this is also another small category for lapses. Results also showed that 70 - 80 percent of people who go through treatment programmes were lapsing within the first 6 months resulted in a causal search being undertaken to explain these results (Marlatt , Curry and Gordon 1980).

Treatment Programme Ideologies

The ideologies that the treatment programmes required their patients to accept while in treatment, was focused on by researchers looking to solve the problem of a high recidivism rate amongst chemical misusers (Marlatt 1973). For example the disease model advocates complete abstinence as the only acceptable treatment goal. The absolute requirement of abstinence as a self-control goal may in itself actually increase the probability that a lapse will escalate into a complete 'loss of control' relapse. The goal of abstinence allows no room for error; if you use drugs you blow it and your disease resurfaces. Self help groups have slogans such as "one is too many, a thousand is not enough" (Narcotics Anonymous.) or "one drink a drunk" (Alcoholics Anonymous.) to reinforce this principle; "if you use, you lose". There is a strong emphasis on the dichotomy of abstinence and excess, absolute control versus loss of control. Another approach that the disease model takes is to equate the person with their disorder, that an alcoholic is a person who drinks to excess, and that using morphine/homebake indicates they are a drug addict who has the disease of addiction, which in turn is the cause of their excess use and the trouble that they get into. Treatment based on the disease

model attempts to change the basic personal orientation or belief system of the addict through a combination of confrontation procedures and/or conversion techniques. The reliance on uncontrollable, endogenous factors as responsible for the initial development (aetiology) of the addiction is emphasised in the disease model. The addiction treatment programmes based around this philosophy do not include emphasis on training and preparation for coping with potential lapse situations and possible relapse. Their focus is on fostering a firm and absolute commitment to abstinence as the one and only treatment goal. Many programmes assume a hardline against any drug use (alcohol, narcotics, marijuana), in fact anyone honestly admitting using these substances while in treatment can be punished for doing so by being expelled from the programme (Queen Mary Hospital, Hamner Springs N.Z.). It is unrealistic and therefore potentially self-defeating to somehow assume that most people will be totally successful in their attempts to maintain total abstinence. To the extent that people adopt this absolute criterion for success, the first time a lapse occurs they are likely to feel a total failure, even though from a statistical standpoint the experience of an initial lapse is highly probable and not at all abnormal.

This approach compares with the self-control model which approaches addiction as a more individualised selection of treatment goals ranging from abstinence to controlled or moderate use. Adherents to the self-control approach believe that a persons behaviour can be taken as an indication of their entire identity. In the treatment of their clients, every attempt is made to create a sense of detachment between the problem (addictive) behaviour and the person's identity or self-concept. Detaching the individual facilitates an objective, nonevaluative approach to their treatment, whereby the client is trained to become their own personal scientist-therapist using objective

observation of their target behaviour as the essential information to work with in treatment. The goal of treatment is to train the person in a combination of behavioural coping skills, cognitive restructuring techniques and lifestyle-changing procedures. As a result of the treatment received from the self-control therapists, it is assumed that the person eventually will perform their newly acquired skills and attitudes without the assistance of external aids, such as the continued availability of the therapist or other support groups (N.A.,A.A. etc). Brickman, Rabinovitz, Karuzu, Coates et al. (1982) examined the models of addiction and derived four general models that specified the forms of behaviour exhibited when people try to help others or help themselves. In the moral model people are held responsible for both the problems and solutions and are believed to need only proper motivation to overcome their difficulties. In the medical model people are seen as responsible for neither problems nor solutions and are believed to need treatment. In the enlightenment model people are seen as responsible for their problems but unable or unwilling to provide solutions, and are believed to need discipline. In the compensatory model people are seen as not responsible for their problems but responsible for the solutions. This model endorses the principles found in the Relapse Prevention (RP) model: "You are not responsible for being down, but you are responsible for getting up" (Rev. Jessie Jackson) (Marlatt and Gordon 1980).

Relapse Prevention

Over the last decade RP has emerged as an innovative approach to both the conceptualisation and treatment of addictive behaviours. Marlatt (1985,1988,1989) has produced an impressive body of work which has

identified the processes influencing and constituting relapse, along with developing a number of unique treatment strategies and methods. The RP approach to addiction encompasses many habit change problems, including chemical addictions such as alcohol abuse, smoking and drug abuse, along with other compulsive disorders such as eating problems , compulsive gambling, and sexual impulsive disorders . RP applies to habit problems where there is a need to establish and maintain long-term behaviour change (Daley, 1989).

The RP model was initially developed as a behavioural maintenance programme for use in the treatment of addiction problems such as alcohol and other drug dependencies (Marlatt & Gordon, 1989). RP is a self management programme designed to enhance the person's experiences in the maintenance stage of the habit process. In RP the goal is to teach the person how to enhance understanding, so as to be able to anticipate and cope with the problem of relapsing when it arises. Relapsing is seen as a major theme and is central to the RP approach. Relapse has been viewed by the addictions field as any use of drugs following an abstinence oriented treatment programme. This outlook is reflected in most of the traditional treatment outcome literature, where people are reported as either a success (maintaining abstinence) or a failure (any violation of the abstinence rule). This view does not find support in the RP model of relapse. Relapse is seen as a transitional process, a series of events that may or may not be followed by a return to baseline levels of the target behaviour. The RP model views the occurrence of a lapse as a fork in the road, with one path returning to former problem levels (relapse or total collapse), the other path continuing in the direction of positive change. RP distinguishes a lapse, a single instance of

violating a self imposed rule, from a relapse, a violation of a self imposed rule or set of rules governing the rate or pattern of a selected target behaviour. The division of lapse from relapse negates the usual all or nothing view and permits the less pessimistic inference that lapses do not always lead to relapses. A lapse is seen not as an end state but as a transition state where relapse is but one possible outcome scenario: other possibilities include return to abstinence or adoption of a moderation pattern (non-problematic expression of the behaviour). Viewing a lapse as a single mistake or error rather than an inevitable trajectory to a relapse, is intended to result in a lapse becoming recoverable, not leading to a full-blown relapse. A lapse can indeed be seen as a valuable learning experience in the trial and error process of building a life free of former addiction (Daley, 1989).

The Relapse Prevention Model

RP is based on the principles of social learning theory (Bandura, 1971, 1977), combining behavioural skill training, cognitive interventions and lifestyle change procedures. Procedures can be applied either in the form of a specific maintenance programme to prevent relapse or as a more global programme of lifestyle change. The goals of a specific maintenance programme are to anticipate and prevent the occurrence of a relapse after the initiation of a habit change attempt, as well as to help the person recover from a lapse before it escalates into a full-blown relapse. Once an addict has stopped using, RP methods can be applied towards effective maintenance of abstinence. A more general application of the RP model is to facilitate global changes in personal habits and daily lifestyle, so as to reduce the risk of physical disease and/or psychological stress. The overall aim is to teach the

person how to achieve a balanced lifestyle, centred on the fulcrum of moderation (Marlatt, 1985), so preventing the development of unhealthy habit patterns. RP therapeutic strategies and methods derive from the assumption that relapse occurs as a process, seen for example in discrete interlinking steps over time. As such RP is primarily interested in and applicable to the maintenance stage of treatment. Relapsing is not seen as an all or nothing phenomenon, where a person moves directly from a state of abstinence directly to a state of relapse. The relapse process is viewed as a cognitive - affective - behavioural chain leading from abstinence to relapse, a breakdown in the persons attempt to modify their addictive behaviour. Although each person has their own particular relapse pattern that is shaped according to processes common to all addictive disorders, it is helpful to divide the relapse process into two components: firstly events and processes that lead people into high risk situations (HRS) which can set the scene for a possible relapse, and secondly the events and processes that lead from a HRS to a lapse and potentially a relapse.

High Risk Situation (HRS)

A HRS is defined broadly as any situation that poses a threat to the persons sense of control and increases the risk of a lapse occurring (Marlatt and Gordon 1980). Sense of control refers to the subjective expectancy of being able to cope effectively with the situation without giving in to the temptation of the old addictive coping behaviour. What constitutes a HRS varies as a function of several variables. Temporal factors are important, as in the very early stages of abstinence there are various degrees of physical withdrawal (e.g. heroin, alcohol and other drugs are often associated with a

fixed syndrome of physical reactions) although situational factors or expectations may attenuate this effect. For people susceptible to physical withdrawal reactions the first few days of abstinence may constitute a continual high-risk time period. Physical craving may be experienced as a result of withdrawal, or exposure to the drug or drug-related cues that elicit conditioned anticipatory reactions. Direct exposure to these cues (e.g. Morphine tablets for an IV user) almost always constitutes a HRS, especially in the early stages of abstinence (Ponerleau,Fertig, Baker, & Cooney, 1983). Following the initial HRS period, the person is then faced with a variety of other HRS's, the most stressful of which include those situations that previously (prior to abstinence) were associated with the occurrence of the addictive behaviour as an attempt to cope with stress. Negative emotional states and interpersonal conflict situations are more stressful from this perspective than other situations, and the absence of social support increases the risk of a lapse, while having people around who provide support or encouragement lessens the risk involved. The presence of people who are engaging in the taboo behaviour and the availability of the substance will also enhance the risk, however social or situational constraints may decrease the probability of a relapse, for example having people around who are aware that the person is living drug free, and getting positive support from them for not using. Factors included in this category of HRS's are called external determinants, as they exert immediate influence in the precipitation of a lapse. Unless preventative actions are taken to avoid a HRS, this factor can be considered to be uncontrollable and unstable (situations change over time).

As HRS's are considered external factors, there will be less selfblame and guilt associated with the lapse if the person sees the lapse as a unique and

specific event, an exception to the general rule of abstinence. The probability decreases that the person will overgeneralise the effects of a single lapse to all situations due to the situation-specificity of the lapse. The person who focuses on situational factors is more likely to conclude that it is not their fault they lapsed in this situation. The amount of stress experienced in the HRS is another factor that may influence the probability of relapse. In situations of high stress (intense negative emotional states, personal crises etc), the person is more likely to attribute greater coping powers to the addictive habit when a lapse occurs: "I could not have handled the situation without having a shot (IV use of a drug)". A relatively low-stress event may decrease the likelihood that a lapse will escalate into further use, providing the person makes an appropriate situational attribution.

Marlatt has identified three major pathways to HRS, the first one occurring when a person is unexpectedly placed in a situation they find difficult to cope with. The second pathway involves difficulty coping with stressors, resulting in the person feeling overwhelmed and falling back on old coping behaviours. The third pathway to HRS's involves what Marlatt refers to as the covert antecedents of relapse. When the negative influences in life outweigh the positive influences (lifestyle imbalance) and the person lacks the resources for coping with this, stress is experienced which may lead to a desire for indulgence; a sense of deserving or being entitled to something pleasurable. Stress forms from life events, daily hassles or discrepancies between obligations that lead to a sense of being deprived, and a consequent return of urges and craving for a particular substance. Associated with this craving and desires for indulgence are a number of cognitive distortions and maladaptive decisions that in a real sense set the stage for a lapse and

possible relapse, through Apparently Irrelevant Decisions (AID's).

Apparently Irrelevant Decisions (AID's)

Apparently Irrelevant Decisions (AID's) are the mini decisions or choices that superficially appear to be responsible and unrelated to addiction, but which collectively help set up HRS's (Larsen, 1992), resulting in an increased chance of relapsing. Frequently AID's appear acceptable, even praiseworthy but they are motivated primarily to indulge in the prohibited behaviour. The person may not be fully aware of the motives behind these decisions as AID's are frequently viewed as being unconscious, and can function to avoid self-criticism and social disapproval and also provide an excuse for lapsing. An example of this can be found in the alcoholic who just happens to go for a walk by his favourite drinking spot and claims that "It would have taken superman to resist the pressure to drink". It is argued by Janis and Mann (1977) that all decisions involve conflict resolution and therefore presuppose conflict over possible options and alternatives. A major problem for the AID's pathway to HRS's is the avoidance of awareness and responsibility for the decision creating these situations, making it less likely they will be prepared for coping effectively with the HRS. The major type of maladaptive decision associated with AID's has been labelled "defence avoidance".

Defence Avoidance

Defence avoidance involves the person escaping from conflict by procrastinating, shifting responsibility to others (Ward 1992), and through the use of rationalisation (minimising or denying the negative consequences of decisions and magnifying the perceived benefits). For example the person

may say that they used drugs because another person brought them around, and as it was a nice day, and they had not used for some time, they decided that they would not get a 'habit' (addicted to daily use of a chemical), plus it did not cost them anything financially.

Self - Efficacy

Self efficacy is a cognitive process which deals with perceived judgments or evaluations that people make about their competency to perform adequately in a specific task situation. Self-efficacy judgments are always aimed at the situation at hand, not towards mastery or competence across all situations. Self-efficacy judgments (Bandura, 1982) are based on four main sources of information: the person's own performance accomplishments, vicarious observation of the performance of others, the influence of external persuasion and social influence, and states of emotional arousal. The person cognitively appraises the information from these four sources to arrive at their rating of self efficacy. The most important source of information for inferring self-efficacy judgments in the RP model involves the persons performance accomplishments and the success and failure experienced in coping with HRS's. High levels of motivation, the commitment a person makes to achieving their goals, and self-efficacy are important in a successful RP programme. A coping response may fail to be initiated despite high levels of motivation if the person has a low self-efficacy concerning their ability to engage in the behaviour, as also a person may fail to engage in the appropriate behaviour despite high levels of self-efficacy if the motivation is low or absent ("I knew what to do but I didn't want to").

When a HRS occurs, there is a conflict of motives between a desire to

maintain control and the opposing temptation to give in to impulse. Self-efficacy concerns the person's perceived ability to perform a coping response: it is an active behaviour developed to deal effectively with the specific situation, not the ability to exercise control or resist temptation (willpower) to give in to the addictive process. The probability of relapse in a HRS decreases considerably when the person harbours a high level of self-efficacy for performing a coping response. If a coping response is successfully performed the persons judgment of efficacy will be strengthened for coping with similar situations as they arise on subsequent occasions. Strengthened self-efficacy reduces the risk that occasional lapses will precipitate a relapse (Bandura, 1981).

Problem of Immediate Gratification

Another problem involved in the lapse situation is the Problem of Immediate Gratification (PIG) which results in the ignoring or filtering out of both short-term and long-term negative consequences of a lapse. Through focusing on the immediate pleasurable features (in association with impaired decision making) the chances of a lapse occurring increases . The PIG is usually seen as mediating the transition from a HRS to a lapse. Once a person has lapsed the biphasic effects of the drugs function to intensify the positive experiences. The drug has an initial 'high' or positive effect with delayed negative consequences.

Cognitive Deconstruction

The concept of cognitive deconstruction was developed by Baumeister (1989, 1990, 1991a, 1991b) in his recent work on suicide, alcoholism, sexual

masochism and binge eating. He has utilized the work of Carver and Scheier (1981), to develop his theory of escape from self in which the concept of cognitive deconstruction plays a major role. He argues that there are three reasons why people attempt to escape from the burden or implications of self-awareness : a) to escape from the effects of a traumatic or particularly stressful experience; b) as a regular stress management strategy and; c) to transcend the self in search of a religious experience. Alcohol or other addictions may be indulged in for any of these reasons but typically involves the first two. Relapse is usually associated with the first reason and the development of the addiction with the second. A person can use drugs etc in order to escape from the stress of the self and self-awareness, which can lead to addiction if the dependence becomes great. In terms of relapse, if a person is struggling to cope with a particular situation, they can attempt to escape from self-awareness which can lead to increased chances of relapsing. The key idea here is that there are multiple levels of meaning associated with human action which are structured hierarchically. These range from the highly abstract through to concrete levels of meaning and interpretation, with each level having specific goals and strategies associated with it. Attention is thought to be the way that particular levels are activated. Escaping from self-awareness involves narrowing the focus of attention from abstract or higher levels of consciousness to concrete or lower levels. This shift effectively disengages self-evaluative processes which are thought to result in the experiencing of negative emotional states.

The first pathway to cognitive deconstruction involves the escape from the implications of a stressful or traumatic experience. When a persons behaviour or situation falls short of their expectations they attempt to explain

it through engaging in an attributional search. If an attribution is made to internal aspects of the self, the person compares the outcome to pertinent self-standards. The results of this are a heightened self-awareness and the subsequent experiencing of negative emotions. The self is perceived as inadequate and guilty of failure. The person may attempt to escape from this self-evaluation and the associated negative emotions by shifting to a lower level of meaning or action identification.

If the self and human behaviour is viewed as constructed from social and cultural factors, then cognitive deconstruction means literally stripping meaning away and focusing on the most concrete and physical aspect of the self. A person in such a deconstructed state of self-awareness is: 1) more concrete, focusing on sensations and movements; 2) concentrates on the here and now, e.g. the time perspective is narrowed; 3) is guided by proximal as opposed to distil goals; and 4) constrained by rigid, uncreative and superficial thinking. The effects of such a state of cognitive deconstruction is to undercut the comparison of the self with pertinent standards and therefore self-awareness is avoided or escaped from. Certain consequences follow from this escape from meaning and higher level cognitive activity, in that people become more disinhibited and are therefore more likely to violate their usual ethical and personal standards. There is a tendency for them to be more passive because of the lack of higher level plans and their perspective and goals are influenced more by situational factors. Behaviour as a consequence is often compulsive, mindless and habitual. Another important consequence of being in a state of cognitive deconstruction is that the person lacks intense emotions, and their thinking is more simplistic and irrational. The awareness of irrational or contradictory thinking is dependent upon the existence of

higher levels of meaning. This state is unfortunately difficult to sustain and environmental cues may result in a movement out of cognitive deconstruction, up into higher levels of meaning. Although affect is considerably lessened, the person may still experience vague feelings of unhappiness and similar mood states without knowing why. As a result it is not a 100 percent perfect solution to the problem of self-awareness or self-evaluation, as individuals move in and out of deconstructed states, often turning to various addictive behaviours to escape e.g. alcohol, sexual offending, binge eating (Baumeister 1991, Ward & Hudson 1992).

Critique Of Relapse Prevention

Hudson, Ward, & Marshall, (1992) have criticised Marlatt's linear model of RP, saying that in his model of the antecedents to HRS's he has not clearly shown that you need to have at least three pathways to HRS's and lapses when a person is committed to abstinence, that is unexpected events and lifestyle imbalance as HRS's and AID's. Also included is a need for feedback from a lapse to a HRS and an AID. This would enable the model to explain the fact that the person frequently experiences a number of lapses before ultimately relapsing, and that a lapse may lead back to new AID's or simply back to a HRS. When a person is committed to abstinence, experiencing a desire for indulgence in some 'gear' (a drug) will lead to a discrepancy between personal standards and the current situation which they are in. Depending on the strength of the initial commitment to abstinence, the person may attempt to escape from self-evaluation and consequent negative affect by moving into a state of cognitive deconstruction. For some people the re-experiencing of the desire to indulge in drugs creates conflict and this may lead them to feel inadequate, etc. The result is a focus on proximal goals and a

narrowed time perspective which leads to greater salience of sensation and greater susceptibility to environmental influences. This impaired thinking can result in the setting up of HRS's, not through unconscious planning but rather the consequence of cognitive deconstruction. Focusing attention on lower levels of meaning and action identification results in a preference for short-term consequences and goals. There are three mechanisms associated with cognitive deconstruction that lead to AID's-type planning: that the lack of higher level planning and interpretation causes mindless behaviour and a drift to HRS; that planning is a result of greater susceptibility to environmental cues; and that the focusing on proximal goals in association with the concrete level of cognitive operations means that the person fails to appreciate the negative consequences of addictive behaviour. Ward, Hudson, & Marshall, (1993) argue that this is not due to denial or the working of the unconscious, as appreciating harmful consequences presupposes concepts belonging to higher levels of meaning. As a result the person is not necessarily avoiding awareness of planning, but rather as a consequence of escaping from negative self-evaluation plans or thinks in a simplified and concrete way.

An implication to this approach may indicate that there are a number of related mechanisms involved in AID's, the person may be seeking to avoid self- evaluation precipitated by the re-emergence of a desire to indulge or by other causes, for example relationship difficulties. The emphasis here is that once an individual enters a cognitively deconstructed state, the consequences of deconstruction can lead to AID's and ultimately HRS's. Rather than functioning to disguise the true or underlying planning, cognitive distortions or irrational thinking represent an integral part of cognitive deconstruction.

Thinking at a low level of meaning is superficial and the person is not aware of irrationality. A desire for indulgence in a drug may actually be conscious and precipitate the process resulting in cognitive deconstruction. The person may fail to appreciate the relationship between the desire and subsequent planning because of the effects of deconstruction- impaired self-awareness and meta-cognitive functioning. There are a number of possible pathways to a state of cognitive deconstruction as there will be incidences where the desire for indulgence does not precede deconstruction and AID's.

Once a person is in a HRS they may fail to utilise their coping skills as a result of cognitive deconstruction rather than because of a lack of them. They may fail to recognise the HRS or in fact recognise it but lack the capacity to effectively solve the problem, due to the effect of deconstruction. Also the passivity and disinhibition characteristic of deconstruction creates further vulnerability to HRS's. The result is that it is not necessarily a lack of coping skills that is the problem, but a failure to put them into practice.

If a person moves out of a deconstructed state they would be more likely to use their coping skills to resume control. RP puts a great deal of emphasis on developing self-awareness and meta-cognitive skills, which shift attention to a higher level of meaning, and therefore increases the chances that the person will employ their coping skills. When a person remains in a deconstructed state their passivity, lack of intense emotion, cognitive impairment and disinhibition means they are more likely to lapse. In addition, focusing on sensation and movement (concrete level of meaning or action identification) results in the person focusing on a short-term pleasurable facet of impossible behaviour. A worsening of long- term negative consequences and broad implications for themselves and others

would require higher level cognitive activity. In essence an explanation of the PIG phenomenon is provided. When a person lapses, they are not falling back on old coping strategies, but rather they are making poor decisions because of the effect and characteristics of cognitive deconstruction. Whether an initial violation of abstinence rules results in relapse depends on the strength of the consequent effect of this behaviour i.e. the Abstinence Violation Effect (AVE).

Chapter Three : Recent Publications on the Abstinence Violation Effect .

There has been very little empirical research into the AVE in chemical misusers, although there has been some research that attempts to measure the components of the AVE and thereby establish its existence in the addictions fields. There have been five recent studies that have focused on the AVE, and it is to these that I now turn the attention.

Birke, Edelman, and Davis, (1990) researched the impact of the AVE on relapse in illicit drug-users. Subjects were interviewed in their own homes and completed a semi-structured interview and attributional measure. The attributional style of abstainers and relapsers were examined besides the HRS that precipitated resumed drug use. They did use Marlatt's earlier version of the AVE, where both cognitive dissonance and attributions combine to produce the AVE. The AVE was measured by modifying the Attributional Style Questionnaire. Their results did not support the existence of the AVE, and they argued that it may be more relevant for other addictive behaviours, rather than in illicit drug users.

A major problem with this study is the measurement of attributional style rather than post-event specific attributions. In Marlatt's model of the AVE it is the persons attribution for a specific outcome or behaviour that is important, rather than the attributional style of the person. This represents a different level of analysis and arguably undermines their conclusions concerning the AVE. They also neglected to measure affect and emotion, or assess the attributional dimension of controllability.

Curry, Marlatt, and Gordon, (1987) provided evidence for the attributional component of the AVE in smokers. The measurement of the

AVE consisted of obtaining an average of three attributional dimensions. The attributions for responsibility following initial lapses were assessed both prospectively and retrospectively. Their subjects were presented with the former condition, and asked to imagine themselves in each situation. They were then asked to fill out the scales twice, once for each of two outcomes, abstinence and smoking. They identified a cause for the outcome and filled out attribution rating scales traversing the attributional dimensions of locus, stability and globality. Those subjects who had lapsed supplied retrospective causal attributions for initial smoking episodes using the same rating scales. Guilt and stress were measured on a seven point rating scale. The results indicated that participants who relapsed following a slip reported a significantly larger AVE than those who resumed compliance with their abstinent rules. The AVE score emerged as the strongest predictor of later smoking.

One problem with this research is the failure to measure affect adequately; only guilt and stress were assessed. In addition, one of the attributional measures (the prospective measure using hypothetical situations), confounds attributional style with post-event specific situations. Another problem is the failure to directly measure the controllability dimension or to include it in their definition of the AVE (higher scores on the attributional dimensions of locus, globality and stability). Marlatt stresses the importance of controllability in intensifying the negative affect associated with the AVE.

Schoeneman, Hollis, Stevens, Fischer, and Cheek, (1988) compared smokers who had relapsed after a period of abstinence with those who had lapsed but returned to abstinence. Of particular interest for them was

whether or not the two groups were discriminated in terms of characterological versus behavioural self-blame, as the former was thought to be an important part of the AVE. Schoeneman et.al.(1988) hypothesised that relapsed subjects would show a more intense AVE with greater endorsement of characterological causes, while those who returned to abstinence would engage more in behavioural self-blame. Their results tended to indicate that while relapsers were more likely to ascribe lapses to characterological causes, there was no difference between the two groups on the attributional dimensions or emotions scale. These results did not provide support for the AVE.

Collins, and Lapp, (1991) assessed the AVE in social drinkers. In a cross-sectional test of the AVE a community sample of social drinkers completed measures of perceived efficacy for controlling alcohol consumption and causal attributions for drinking related events. They addressed the role emotions in the AVE by including a measure of negative affect, the Beck Depression Inventory (BDI). They developed the Drinking Attributional Style Questionnaire to assess the attributional style for drinking related events. One of the major hypotheses was that if the AVE occurs among social drinkers, then attributional style and measures of alcohol restraint (control) should predict alcohol problems and greater consumption. The tendency to attribute causes of drinking to internal, stable, and global characteristics in association with elevated BDI scores, predicted higher levels of alcohol consumption and related problems. This was thought to provide some evidence for the AVE.

A problem with their method is the use of attributional style as a measure although they do focus on specific drinking related events, plus they

also fail to include an adequate measure of the controllability dimension.

When testing for the AVE hypothesis it is necessary to measure both emotions and attributional dimensions. Haaga (1989) and Curry et.al.(1987) have conceptualised the AVE as a combination of internal/ external, stable / unstable and global / specific attributional dimensions and by obtaining an average (here the higher the score the greater the AVE) arrived at a single AVE score. A problem with their approach is the failure to include the attributional dimension of controllability, which resulted from their following Marlatt's model of the AVE (Marlatt 1985b). Even though Marlatt does discuss the important role of the perception of uncontrollability in creating the AVE, he does not explicitly include it as part of the attributional component. Another difficulty is their failure to assess emotion or affect in a comprehensive way. A positive aspect of the definition of the AVE used in these studies is the combining of the attributional dimensions (Ward 1992).

The research evidence for the AVE is a mixture of supportive and unsupportive studies at this stage. The major problem is that the majority of the research is guided by a flawed AVE construct, which has lead to the use of inadequate measurement strategies. The focusing on the dimension of controllability, and assessing a wider range of emotions, would be a valuable extension into the research on the AVE.

Chapter Four : The Abstinence Violation Effect (AVE)

The AVE was first described in a paper by Marlatt, (1978) presenting a cognitive-behavioural account of the relapse process in alcoholics, it being seen as a possible common psychological reaction amongst those violating a self-imposed abstinence rule. The term itself (abstinence violation effect) was first introduced by John L Rogers, a student in an alcoholism seminar at the University of Washington. The AVE was introduced to highlight the influence of the psychological-emotional reactions triggered by an initial lapse. Evidence supporting the AVE as a common psychological reaction to violating an absolute rule such as " I will not take mind altering chemicals ever again", was found in a variety of relapse episodes, including cases in which no actual drug was involved e.g. violating a strict dietary regime, compulsive gambling, and sexual offending (Ward, Hudson and Marshall, 1992). The AVE was postulated to occur under the following conditions: that the person had made a voluntary choice or decision to change a target behaviour, and that prior to the first lapse the person is personally committed to an extended or indefinite period of abstinence. The intensity of the AVE will vary as a function of several factors - the degree of external justification; the strength of prior commitment expended to maintain abstinence; the duration of the abstinence period; the presence of significant others; the perception of the initial lapse as a voluntary choice of preplanned activity; and the subjective value or importance of the prohibited behaviour to the person. The AVE was said to be a dimensional phenomenon varying in intensity with relapse being associated with more intense effect.

Since the AVE was first introduced, attribution theory has undergone

considerable growth and redefinition. Weiner, Russel, and Lerman, (1978) believe that behaviour is guided by cognitive processes and that people are seekers and processors of information. Weiner aligns himself with researchers such as Lazarus, (1966) and Valins, (1966) who believe that cognitions are necessary and sufficient causes of emotion. The notion that emotional states are primarily determined by cognitive processes (you feel the way you think) is also held by contemporary cognitive - behavioural therapists such as Ellis, (1974), Beck, (1976) and Beck, Rush, Shaw, and Emery, (1979). Along with the assumption that cognitive processes determine affective reactions, these theorists also assume that certain cognitions interlock with each other. In particular it is believed that attributions of causality have an influence on subsequent expectations of future performance capabilities in similar situations (Abramson, Garber, & Seligman, 1980). In Weiner's, (1972, 1974) initial analysis of perceived causality in achievement related contexts, he postulated four causes that people may use to explain a prior success or failure in a given task: level of ability, the amount of effort expended, degree of task difficulty, and the direction of experienced luck. Other perceived causes of success and failure exist (fatigue, mood, illness etc), however Weiner found that the first four causes listed are those most frequently perceived in achievement settings in this culture.

Weiner, (1974) also describes a three-dimensional taxonomy that subsumes the perceived causes of success or failure. These causal dimensions are second order concepts used by attributional theorists to organise the causal concepts of the lay person and are not intended to represent the first order attributions given by the ordinary person. The first dimension is locus of causality, and refers to the internal vrs the external descriptions of causes.

Ability, effort, mood, and patience are examples of properties internal to the person; whereas task difficulty and luck are external or environmental causes. The second dimension, stability, describes perceived causes along a continuum ranging from stable (invariant) to unstable (variant). The difficulty of the task , patience, and ability are likely to be perceived as relatively fixed, whereas luck, effort and mood are seen as more unstable. The term luck implies random variability, in which effort may be augmented or decreased from one episode to the next, and mood is typically conceived as a temporary state. The third dimension, controllability, refers to causes that are perceived as being either under volitional control or uncontrollable. Controllability implies volitional control which implies instability. Unstable causes need not be perceived as controllable (fatigue, mood), but causes that are subject to volitional control are more likely to be perceived as unstable. In addition, effort is the single internal cause that appears to be under volitional control. Additional causal dimensions have been suggested by other theorists: Abramson, et. al., (1978,1980) suggested the addition of global- specific dimensions, described as orthogonal to the locus of causation and stability factors. A global attribution implies that helplessness will occur across situations , whereas a specific attribution implies helplessness only in the original situation. Universal helplessness is characterised by the belief that an outcome is independent of all of ones own responses as well as the responses of other people (e.g. "no one, including myself, could have resisted that"). Personal helplessness is where the person believes that there exist responses which would contingently produce the desired outcome, although they themselves do not possess them (i.e. "others resisted but I could not"). It is hypothesised that personal helplessness leads the person to make internal

attributions, whereas universal helplessness leads to external attributions. These distinctions have important implications for understanding the conditions under which some people set up relapse situations in such a way as to avoid making internal attributions (accepting personal responsibility) for their actions. Weiner, Russel and Lermans' (1978) research showed that attributions for failure resulted in greater emotional impact when the perceived cause is ascribed to a lack of effort rather than a lack of ability. Even though both effort and ability are internal factors, effort attributions elicit moral feelings - that trying to attain a socially valued goal is something that one "ought" to do. Also effort is believed to be under greater volitional control than ability, and is associated with more intense affective reactions, whereas ability is perceived as relatively nonvolitional and stable over time. Weiner's results showed that ascription of failure to lack of effort generated reactions of guilt and shame. Wortman, and Brehm, (1975) emphasised that failure ascribed to lack of effort is more likely to elicit reactions of perceived loss of control. Of the four attributional causes described by Weiner (effort, ability, task difficulty, and luck) effort is the one cause that is considered readily controllable, as it is unstable (changeable), internal and specific in terms of attributional dimensions. Empirical findings from Garber, and Seligman, (1980); Kirschenbaum, and Tomarken, (1982); and McFarland, and Ross, (1982) provide support showing that failure on various tasks is made to internal, global, and stable attributions, while success experiences are more likely to be attributed to external, specific and unstable attributions (Hammen, and Krantz, 1976; Klien, Fencil-Morse, and Seligman, 1976; Rizley, 1978).

Storms, and McCaul, (1976) described a theoretical model showing how

internal attributions for dysfunctional behaviour serve to exacerbate or increase subsequent occurrences of the same behaviour. A person observes some unwanted or uncomplimentary aspect of their behaviour for which they make a dispositional self-attribution. This self-attribution often takes the form of inferences about real or imagined inadequacies, psychological disorders, character flaws, lack of self control, personality deficits and deviant tendencies. These negative views of the self give rise in turn to a variety of unpleasant emotions such as anxiety, guilt, frustration, and even self-hatred. These emotions then promote increases in the emotional behaviour which began the whole process. Two essential steps are proposed in this model; firstly that attributions of dysfunctional behaviour to negative dispositions in the self produces an increased emotional state, and secondly that increased emotionality exacerbates the occurrence of some dysfunctional behaviours.

Storms and McCauls model draws upon Duval and Wicklands (1972) theory of objective self-awareness, which states that at any one time a person is in one of two conscious states: attention is either directed inward toward the self (objective self awareness) or directed outwards towards the environment (subjective self- awareness). This developes to the extent that a person's behaviour stands out, and is noticeably different or unique, thus the person is pushed toward objective self- awareness. This usually leads to increased negative affect to the extent that the person compares their behaviour at the time to internalised standards of an ideal self. Research from Duval, and Wickland, (1972) and Wickland, (1975), designed to test the predictions of this theory, have shown that objective self-awareness associated with a negative discrepency (based on a comparison between actual and ideal self image or behaviour) elicits negative affect, often in the form of self criticism or lowered self esteem.

Redefining The Abstinence Violation Effect

From the advances in attributional theory the AVE was assumed to occur under the following conditions: the person is personally committed to an extended or indefinite period of abstinence and a lapse occurs during this time period; the AVE is a cognitive / affective reaction to an initial lapse (slip) that influences the probability that the lapse will be followed by an increased use of the substance or activity; and that the AVE is described as a dimensional construct:- in that the greater the AVE the greater the probability of a relapse or an exacerbation effect following the initial lapse. There are two components to the AVE, namely a cognitive attribution as to the perceived cause of the lapse plus an affective reaction to this attribution. The role that the attributions have on future expectations, and therefore future events as well as the probability of a relapse- is central to the AVE construct (Marlatt and Gordon, 1985).

The AVE can increase the probability of a lapse escalating into a relapse in the following way. When a lapse occurs, the person's attention is directed inward, shifting to a state of objective self-awareness (Duval, and Wickland, 1972) or increased self-attention (Carver, and Scheier, 1981, 1983). The lapse is evaluated in terms of the person's degree of responsibility for the event: why did the lapse occur? If the attribution is directed toward external, unstable and specific factors (e.g. a momentary lapse in coping with a specific HRS), the AVE will be minimal or decreased, and the person will retain a perception of control (self-efficacy will remain relatively unaltered). If however the person attributes the lapse to internal, dispositional factors, they will experience a negative emotional reaction. Objective self-awareness theory holds that this negative affect is elicited by a comparison of the

person's immediate behaviour (the lapse) to internalised standards of ideal behaviour (to maintain abstinence). The greater the discrepancy between the actual behaviour and the idealised standards, the greater the reactions of guilt and self-blame. If the attribution for a lapse is made to internal, stable and global factors (e.g.lack of willpower, physical addictive disease mechanisms), perception of increased loss of control (decreased self- efficacy) will also occur. The experience of guilt, perceived loss of control and self- blame is an aversive, unpleasant state that has motivational or energising properties. This aversive reaction causes the person to experience a dissonant conflict between their ideal self-image (abstinence) and their discrepant behaviour (the lapse). The resulting state of dissonance (Festinger, 1964; Steele, Southwick, and Critchlow, 1981) serves to motivate cognitive or behavioural responses designed to reduce this conflict.

The aversive affective reaction increases the probability that the dysfunctional behaviour that triggered the lapse will increase (a relapse will occur), which is in line with the emotional exacerbation effect described by Storms, and McCaul, (1976). There are two mechanisms that may occur to produce this exacerbation effect: the first is a behavioural reaction and the second is primarily cognitive. The behavioural reaction is caused by the negative reactions (increased guilt, frustration, anxiety) energising the overlearned, dominant, habitual responses (the old addictive habit pattern) to occur. To the extent that the person has learned to rely on the old addictive habit as an attempt to cope with similar negative emotional reactions in the past (i.e. drug-taking to relieve anger), the exacerbation effect is even more likely to occur. This reaction may lead into a vicious circle where the person attempts to cope with the reactions to the initial lapse by repeating this same

dysfunctional behaviour, and a total relapse or binge reaction may then occur. A cognitive reaction may occur when the person attempts to cope with the negative emotional conflict state and perceived loss of control by cognitively redefining the self-image to bring it in line with the ongoing dysfunctional behaviour. Depending on the persons belief system they may redefine the self as an addict or victim of a disease state beyond self-control. The definition of the self as a helpless victim is consistent with this experience of loss of control and may result in the person giving up altogether. The perception of uncontrollabilty increases the exacerbation effect, which is defined as an oscillation of perceived control. The perception of control that exists prior to the first lapse oscillates to the other extreme where the person's perception is one of loss of control. This perception of loss of control is the central factor in the AVE concept (Marlatt and Gordon, 1985)

An increased AVE is postulated to occur when the person attributes the cause of the lapse to internal, stable and global factors that are perceived to be uncontrollable (e.g. lack of willpower and/or the emergence of the symptoms of an underlying addictive disease). The intensity of the AVE is decreased when the person attributes the cause of the lapse to external, unstable (changeable) and specific factors that are perceived to be controllable (e.g. a transitory deficit in coping with a specific HRS). Even though coping is considered to be an internal factor (within the person) the emphasis here is on the external situation that is rendered controllable through the exercising of coping skills. An intense AVE reaction involving attributions that are internal, stable, and global is more likely to show a generalised decrement in expectations of future coping in the person. The effects of a single lapse are more likely to generalise to other situations, as deficits in willpower and/or

being caught in the grips of an addictive disease are transsituational. From the global perspective of "one drink a drunk" (AA) differences in specific situations are of little importance. It is hypothesised that attribution of causality to factors such as an underlying physiological addiction of the pharmacological effects of a drug will increase the probability of relapse. Believing that a lapse is the result of physical craving stemming from a disease or addictive mechanism is to attribute the lapse to internal, uncontrollable, stable and global factors. Some people who have undergone a treatment programme for their addiction problem may attribute the emergence of the craving to the fact that the effects of treatment have worn off, or that the treatment has failed. When the person perceives this to be the case, the lapse and the events that follow are no more subject to volitional control than the symptoms of any other physiological or genetic disorder. Research by Farnia, Fisher, Getter & Fischer (1978) and Fisher& Farnier (1979) has shown that people who are given a biological explanation of a mental disorder are less likely to cope constructively with subsequent problems than people provided with the social learning model. Although emphasising the basis of uncontrollability may to some extent alleviate the person from feelings of guilt or self-blame for the lapse, the overall impact of such an attribution is to surrender their control to overpowering physiological / pharmacological forces. The expectation of regaining control in the future (self-efficacy) will be low in this case, as the powers of the addiction or disease are thought to be independent of situational or temporal changes (especially when the underlying mechanism is perceived to be a progressive disease).

Attributing the cause of a lapse to motivational deficits is also

hypothesised to increase the probability of relapse, as attributions associated with lack of effort are more likely to elicit feelings of self-blame, guilt, and perceived loss of control. Lapses attributed to deficits in willpower (a stable, global deficit) make it more difficult to resume control than attributions that focus on transitory fluctuations of perceived effort (an Unstable Specific deficit). Even though all attributions to motivational deficits are usually considered internal and uncontrollable, those associated with deficiencies in willpower may have the greatest negative influence, particularly for those people who consider willpower to be a stable personality trait or disposition. If a person attributes a lapse to a global deficiency in willpower (a personality trait deficiency), the probability of relapse will increase in comparison with someone who attributes the lapse to a temporary lack of effort (e.g. due to the effects of lifestyle imbalance, fatigue or illness).

The extent to which motivational effort is translated into effective action will depend on the persons repertoire of coping skills, (an internal, controllable, unstable factor). People are capable of acquiring new skills to cope with HRS's. Coping skills are also situation-specific, as a person may have acquired the skill to refuse drinks in a social situation but may be unable to cope constructively with feelings of frustration and anger. Attributing the cause of a lapse to a deficit in coping skills decreases the probability of a relapse. A failure attributed to a coping deficit in a specific HRS is less likely to be generalised to all potential HRS's, as different skills are required for each category of risk. Marlatt proposes that failure to cope effectively with a HRS results in a decrease in self-efficacy and an increase in the sense of helplessness.

A final important factor to be considered as a potential determinant of

relapse is the subjective effect of the substance or activity following the initial lapse. These effects will differ depending on the type and quantity of the drug taken, with the initial rush being even more intense due to the decreased tolerance, resulting from the length of the period of abstinence. This change in physiological arousal may be labelled by the person as a feeling of enhanced power of control, leading to a perception of the substance as an effective coping strategy in enhanced stressful HRS's. Once the stress of the situation has changed to a perception of "feeling better", the person may make the decision that the drug was responsible for those feelings. The person fails to realise that the stress associated with HRS's will eventually change whether or not the person resorts to using the drug as a means of feeling better. The drug used may also contribute to a greater probability of relapse because of the deleterious effects of some drugs on information processing, decision making or the person's ability to execute an adequate coping response. The time immediately following the first lapse is crucial for the prevention of a total relapse, as this is where most people are likely to experience the AVE.

Reformulation of the AVE

Hudson et. al. (1992) hypothesised that reformulating the AVE in terms of Weiner's recent version of attribution theory (Weiner, 1986) will allow a clearer picture of the process, resulting in beneficial implications for treatment. When a lapse occurs and is seen by the person as negative and important, an attributional search occurs. The particular causal attributions made by the person reflect the different emotional and motivational possibilities that follow. If the cause is perceived as internal and controllable

(e.g., a lack of personal effort, "I did not try hard enough") the person may be expected to experience guilt and lowered self- esteem, but they may remain hopeful and continue to adhere to their abstinence goal. If however the cause of the lapse is perceived as internal and uncontrollable (e.g.,"I have no willpower" or "it is the result of an addictive personality"), the person is likely to experience shame, diminished self-esteem and give up attempting to cope, which makes a relapse more probable.

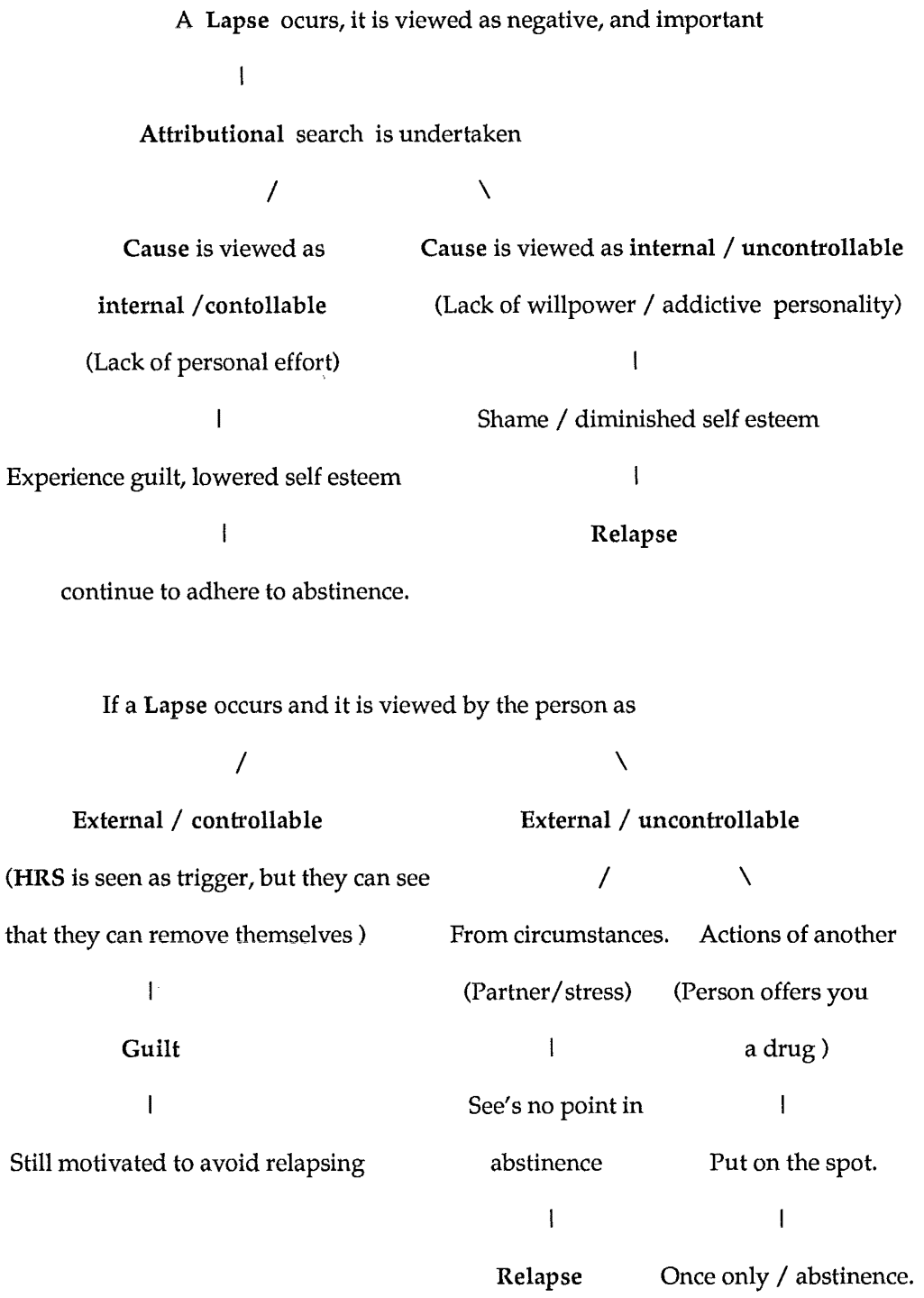
If the cause of the lapse is seen as external but controllable (e.g., the HRS is seen as a trigger but the person sees that they could remove themselves) then the resulting affect is likely to be guilt. Guilt is hypothesised to motivate the person to avoid relapsing. When the cause of the lapse is external but uncontrollable there are two possibilities depending on whether the externally attributed cause is seen as resulting from some whim of circumstance or as a result of the actions of another person. It has been noted, frequently by clinicians, that there is a tendency for people to 'excuse' themselves by attributing responsibility for lapses to partners or stress (e.g.,"It's not my fault there were drugs everywhere at the party"), which are seen as external and uncontrollable. When an unfortunate, unavoidable circumstance is seen as the cause of the lapse, hopelessness is an expected consequent emotional state, and the person is more likely to make no effort to avoid a relapse. When the cause of the lapse is viewed as being the result of another persons actions ("she got me so frustrated and angry"), an external uncontrollable reason, the person will consider themselves justifiably angry at that person and feel justified in taking a drug to calm themselves down, or to get back at that person.

These attributional scenarios constitute the general set of possibilities

that Hudson et. al., call the WAVE (in acknowledgement of its reliance on Weiner's attributional theory). There will be variations in the cited examples possibly resulting in somewhat different emotional responses being evoked in different circumstances. It is best to think of locus, controllability and stability as dimensions rather than categories, so that the degree to which attributions reflect locations along these dimensions will influence the affective response. Hudson et. al.,(1992) consider that the WAVE construct is broader, more integrated and more parsimonious than the previous conceptualisation of the abstinence violation process. It avoids the need to add concepts from self-efficacy theory, as efficacy expectations are part of Weiner's, (1986) account. It is not necessary to refer to additional attentional mechanisms, nor is it necessary to invoke a comparison of ideal and actual behaviour, as is found when using self-awareness theory. The WAVE does not require a reference necessary to drive theory in order to account for the escalation and maintenance of addictive behaviour, and the conflict view of motivation that is embodied in the cognitive dissonance theory is also unnecessary. There is a clear link between cognition, emotion and behaviour in recent attribution theory that predicts failure to cope entirely as a consequence of specific attributions as well as the emotional states they induce. There are clearer predictions concerning the links between cognition, affect and behaviour in the WAVE, which recognises a greater range of emotional possibilities in response to particular causal attribution than does the earlier AVE construct. There also appears to be a number of causal possibilities in the relationship between the AVE and cognitive deconstruction. When a person has lapsed, this may shift them out of a

Fig. 1

The Abstinence Violation Effect



deconstructed state immediately and results in an attributional search and subsequent AVE. Depending on the intensity of the AVE and the type off attributional dimensions involved may result in a number of ongoing behaviours. After experiencing a brief AVE, the person may attempt to escape the self-awareness and associated negative affects from further addictive behaviour or changes that increase the chances of addictive behaviour later on that results in further HRS's, AID's etc. The person may not experience an AVE after a lapse, and remain in a deconstructed state and therefore continue to indulge in their addictive behaviours. The person may interpret the situation and continue to indulge in the behaviour, even though they are no longer experiencing a state of cognitive deconstruction, either through blaming external factors or other persons for the lapse.

Given that the enactment of drug lapsing/relapsing involves a chain of responses, the causal attributions and their consequent emotions may be modified as the chain unfolds. Attributions occurring after important events are clearly dynamic rather than unchanging, so it makes sense to examine specific changes in both causal attributions and emotions across the drug behaviour chain . For example an addict may argue with their spouse, become angry and begin to fantasize about using drugs. At this point they may attribute blame for the fantasizing on the bitchy nature, as they see it at that point, of all spouses and can thereby justifying the initiation of the behavioural chain leading to a lapse. However, once the person has arrived at the source for their lapse, the anger may have dissipated,though they may see themselves as unable to exert control. This will lead to a feeling of hopelessness, or inability to stop themselves from using. These possibilities suggest that an aspect of the research into attributional processes should

examine attributions and emotions at various points in the drug lapse/relapse sequence. This is the focus of the study into the AVE that I have undertaken: namely, does the Abstinence Violation Effect exist in Narcotic Users.

Chapter Five : Hypotheses and Rationale

1) Does the Abstinence Violation Effect exist in chemical misusers ? This question is the focus of this thesis, as there has been very little research carried out on this construct. The problems that have plagued past research have largely been due to an inadequate definition of the AVE. It is the purpose of this thesis to test out the reformulation of the AVE construct on a sample of illicit drug users.

2) If it exists in chemical misusers, where does it occur in the drug lapse / relapse cycle ? Does the AVE exist at a particular point in time during the drug using cycle, or does it exist at various point over the relapse chain? The AVE may even occur in the HRS stage, or the abstinence stage, all four points will be analysed by the measurement techniques descibed in the method chapter.

3) Is there any difference in the AVE between the genders, or do they both experience the same effect ? It would be expected that there are no significant differences to be found between the genders, using the null hypothesis rational. This hypothesis will be investigated in this thesis.

4) How do the positive and negative emotions change across the drug relapse cycle ? Do they intensify or diminish, are there certain emotions that have more influence on the AVE than some of the other emotions, or do they remain relatively unchanged across the relapse cycle?

5) In what way do the positive and negative attributions change over the

relapse cycle ? The results of other exploratory data into the AVE (Ward 1992) have shown that the attributions change very little over the relapse chain, in fact there was no significant differences found in any of the attributional dimensions in Dr. Wards research on child molesters. The subjects in this group are made up of chemical misusers, so there may be a difference in the results that they display concerning their attributions over the relapse cycle.

Chapter Six

Method

Subjects:

Twelve chemical misusers, 7 females and 5 males (Mean age = 32 years,
SD = 4.9, range = 25 - 41 years; Mean IQ = 122, SD = 15.5, range = 103 - 150), constituted the subjects for this study, and they all provided informed consent for involvement in this project. One male was unable to participate as he had not had any period of abstinence from his drug consumption, although he had attempted to stop once, which had resulted in him having an epileptic type of seizure, so he decided to continue to use drugs. Three participants never completed the second part to their research resulting in exclusion from the results. The 12 subjects were not all abstinent at the time of participating in this research, subjects 2, 3 ,4 ,5, 6,and 9 were abstinent from all mind-altering chemicals, subjects 1, 10, 12, and 15 were still using morphine sulphate tablets (M.S.T.'s) intravenously, subject 8 used marijuana, and subject 7 was on the methadone programme. All subjects had experienced the desire to be abstinent from drugs, and had experienced varying lengths of 'clean time' (freedom from all mind-altering chemicals). They had all believed that at the time they had become abstinent they would never use drugs again.

Dependent Measures:

The Differential Emotions Scale (DES)

The DES was developed to help meet the need for the measurement of

the conceptually discrete fundamental emotions. It is a self-report instrument designed to assess the person's experience of fundamental emotions or combinations of emotions. The DES has the potential to assess the entire range of human emotions, and has proven useful in the measurement and analysis of the several emotions that characterise a given situation or condition. It measures the presence of twelve basic emotions using a five point Likert scale. There are thirty six items, (three per emotion), with possible scores for each emotion ranging from three - fifteen. This scale has a number of different forms; the one used in this study was the DES-IV which is a state measure designed to assess emotions at a particular temporal point, and it was specifically designed for people with limited education. The DES is used when assessing the subjective-experience component of the fundamental emotions defined in the differential emotions theory (Izard, Doughty, Bloxom, and Kotsch, 1974). This theory originally defined nine fundamental emotions: interest, joy, surprise, distress, anger, disgust, contempt, fear and shame. The one that I used in this research had twelve emoyions and included shyness, sadness, and guilt.

The DES obtains a reliable measure of an individual's emotions in a given situation, so serving a function in personality evaluations and psychodiagnostic testing aimed at obtaining a better understanding of the emotions involved in normal or abnormal behaviour. The reported psychometric properties of the DES-IV (Boyle, 1984) are satisfactory.

Attributional Dimension Scale (4ADS)

Attributional dimensions refer to the continua of causal explanation. The attributional elements ability, effort, task difficulty, and luck can be

placed on the dimensions locus of control and stability.

Locus of control, or internality, refers to causes that are internal or external to the person, while Stability refers to causes which are stable or changeable over time. Two other dimensions that have been included are controllability and globality. Controllability refers to the degree to which causes are under the individual's control, whereas globality refers to the degree to which the cause can be generalised to all areas of the individual's behaviour or confined to specific areas.

A consistent and well-replicated finding in attributional research is the hedonic basis of attributions . People are more likely to attribute their success to causes which are internal, controllable, global and stable, whereas they tend to see their failures as more likely a result of causes that are external, uncontrollable, specific and unstable. A valid attributional measure should exhibit this hedonic basis so that higher scores on internality, controllability, stability and globality are obtained more often in success conditions than in failure conditions.

This scale (Benson, 1989) directly rates attributions generated by a particular event or in a specific circumstance. The subject describes a cause for an event or circumstance and then completes sixteen five point scales, four for each of the four dimensions i.e. controllability, locus, stability and globality. In the present study the controllability scores were reversed in order to render the direction consistent with the other dimensions as regards the AVE. The 4ADS is appropriate for use with subjects ranging in age from middle childhood to adulthood, and has been found to have satisfactory psychometric properties (Benson, 1989).

Procedure:

Subjects were asked to attend the University of Canterbury at a time that was mutually convenient to both them and the researcher, and to bring with them a written account of their most recent relapse or their most typical relapse scenario. The suggested length for their scenario was between one and two A4 pages, with the average number of words in the vignettes at 753.5.

The subject was asked a series of demographic questions (appendix A), and at the completion of this section the subject was asked to read out their relapse scenario into a tape recorder. The reason for doing this procedure was explained to the subjects, as some experienced hesitation due to the contents included in their material, with two subjects refusing to talk into the tape recorder at all. It was explained that all information was confidential, and no person would hear the recording apart from the subject and the researcher. Recording their story on a tape recorder was necessary, as in the second part of the research the subject was required to listen to it, and to answer two questionnaires relating to what they had said at the four points in the relapse scenarios they had described.

At this stage the WAIS-R IQ measure was administered to the subjects, however not all subjects received this measure, subject 15 refused and time ran out for four other subjects.

At the end of the interview I arranged for a second meeting to take place, to complete the 4ADS and the DES, while listening to the tape recording of their relapse scenarios. I also asked them how they felt after giving their relapse scenarios to see if any of them required a debriefing. One subject became quite distressed after giving her demographic data and I

recommended that she contact the Campbell Centre and talk to somebody there, which she did and is now receiving counselling for early childhood sexual abuse and rape trauma. One other subject, a male, also required some counselling. He had been in recovery for four years and some issues has surfaced regarding his using career, so I recommended that he contact his sponsor from N.A. (Narcotics Anonymous) and attend a few more N.A. meetings, which he also did.

During the break between interviews the relapse scenarios were analysed and divided them up into four areas, initial abstinence from drugs; high risk situations; first lapse; relapse. These were coded Break 1, 2, 3, & 4. When the subjects returned to complete the second stage of the project, four copies of the DES and four copies of the 4ADS were ready for them to complete. At this time it was outlined to them what was required from them, emphasising that it was necessary for them to fill out one 4ADS and one DES for each of the break points that had been selected.

Firstly the tape recording of the relapse scenarios was played, stopping at the end of the first break, when they were asked "What was the reason for your behaviour at this point?". They were then asked to write down their answer at the top of the 4ADS and to answer the questions that were on this form as they would have felt at the time of this event occurring. After they had completed this questionnaire they then completed the DES, answering these questions based on the same event they used on the 4ADS. When they had finished answering the 4ADS and DES for Break One they were played the recording through to the Second Break point, and again were asked, what was the reason for their behaviour at this point, and had them answer the 4ADS and DES questionnaires in the same manner as they had for the

previous break point. This procedure was repeated for the remaining two Breaks.

I had to read out the relapse scenarios to the two subjects who had refused to talk onto the recorder, stopping at the end of each Break Point and asking them to fill out the questionnaires in the same way that the other ten subjects had.

No debriefing was required for any of the subjects at the end of the second session of research into the AVE.

Definition of an Abstinence Violation Effect (AVE)

In order to determine whether or not an Abstinence Violation Effect had occurred the individual emotions of the DES-IV were collapsed into either of two independent categories (positive and negative effect). This was quite straightforward for all emotions except shyness and surprise, so these were ignored for the purpose of identifying the presence or absence of an AVE. The following decisions were made in order to define the presence or absence of an AVE. An AVE was said to have occurred if the negative emotions on the subjects DES-IV was greater than the median score for the group as a whole, at break point one. In most cases this high negative emotional score would be expected to be associated with high attributional scores (i.e., above the median for the group on the combined dimensions of locus, stability, globality & controllability, also at break point one), although so long as a negative emotional state was above the group median, it could be said that an AVE had occurred. We classified AVE's as occurring according to this broader definition. Subjects whose scores did not exhibit these characteristics were rated as not displaying an AVE.

Chapter Seven
Results

Demographic Data

There were 12 subjects used in this research. The mean age was 32 years (SD 15.5), and the range was 25 - 41 years. There were 7 females and 5 males, with the mean IQ = 122, SD = 15.5 and the range was 103 - 150.

Analysis

All the data was subjected to a repeated measures analysis of variance and post hoc multiple comparisons using Statsview and Fisher's PLSD (Abacus Concepts, 1986).

Vignettes

The average number of words in each vignette was 753.5; that is between one and two A4 pages.

Reliability checks were carried out for the classification of the vignettes into the three segments. The experimenter (GJF) initially divided the scenarios into the segments. As an additional check, a second person (SMH) independently classified a sample (4) randomly selected from all the vignettes, into the three sections. The classification did not differ more than one sentence and this was judged to be insignificant.

The AVE

Table 1 reveals that almost all participants were defined as having

experienced an AVE at the HRS, lapse, and at relapse phase.

Table 1.

Abstinence Violation Effect

	phase		
	HRS	lapse	relapse
AVE	12	11	10
not AVE	0	1	2

Table 2 describes the changes in the composite attribution scores and the negative and positive affect scores over the relapse cycle.

Table 2

Composite Attribution, Positive and Negative affect over the relapse cycle

	Break points				
	Abstinence 1	HRS 2	Lapse 3	Relapse 4	total
attributions	12.5	12.0	12.2	12.8	12.5
positive affect	10.4	6.5	6.5	5.5	7.3
negative affect	4.9	9.2	9.3	9.6	9.1

Emotions and the relapse process

As can be seen in table 3, there were significant increases in the negative emotions; sadness F (3,40) = 2.74, p <.05, and hostility F(3,40) = 2.83,p <.05, between break points one and two, and trends in this same direction for guilt, fear, disgust, and anger (i.e., upon entering the High Risk Situation). The positive emotions; interest F(3,40) = 3.23,p <.05, and joy F(3,40) =2.98, p <.05, showed a significant decrease between break points one and two.

Table 3

Emotions across scenario break points.

	Break points				
	Abstinence 1	HRS 2	Lapse 3	Relapse 4	
Interest	10.3	6.2	7.8	7.2	*
joy	10.2	6.3	6.8	6.3	*
surprise	8.9	8.3	7.8	7.7	
sadness	6.1	10.5	10.1	10.6	*
anger	6.8	10.3	9.2	9.8	
disgust	6.8	9.3	9.1	9.8	
contempt	6.4	7.3	5.8	6.3	
hostility	6.4	9.8	10.3	10.6	*
fear	6.3	9.0	9.0	9.7	
shame	6.1	8.3	8.4	8.3	
shyness	5.9	7.8	6.8	7.8	
guilt	7.3	10.0	10.6	10.0	

Emotions and gender

Table 4 describes the gender differences in emotions collapsed over the relapse chain: there were no significant interactions. The male participants reported significantly lower scores for joy $F(3,40) = 5.47$, $p < .05$,and significantly higher scores on the negative emotions contempt $F(3,40) = 12.15$, $p < .001$, hostility $F(3,40) = 4.47$, $p < .05$, fear $F(3,40) = 14.28$, $p < ,001$ shame $F(3,40) = 15.71$, $p < .001$, and shyness $F(3,40) = 16.37$, $p < .001$. The other emotions showed no significant differences between the genders.

Table 4

Emotions across gender

	Gender	
	Female	Male
interest	8.2	7.4
joy	8.4	6.0 *a
sadness	8.8	10.1
anger	8.1	10.3
disgust	7.9	9.7
contempt	5.1	8.3 **b
hostility	8.3	10.6 *
fear	6.8	10.8 **
shame	6.2	10.0 **
shyness	5.5	9.4 **
guilt	8.9	10.3
surprise	7.9	8.6

NB *a* significant at $p < .05$
b significant at $p < .001$

Attributions and the relapse process

As table 5 suggests, there were no significant differences in any of the four attributional dimensions across the four segments of the relapse process.

Table 5

Attributions across scenario break points

	Break points			
	Abstinence 1	HRS 2	Lapse 3	Relapse 4
uncontrol.	10.1	12.0	11.6	13.3
locus	16.8	15.2	14.3	15.3
stability	14.0	10.6	13.6	14.1
globality	11.4	10.8	10.9	11.0

Attributions and gender

Table 6 describes these data. Gender was not related to scores on uncontrollabilty F (1,40) = 1.4,ns, but males scored significantly higher than females on: locus F (1,40) = 9.84, $p < .01$, stability F (1,40) = 12.84, $p < .001$, and globality F (1,40) = 8.70, $p < .001$.

Table 6

Attributions Across Gender

	Gender	
	Female	Male
uncontrol.	12.2	11.1
locus	14.5	16.7 *
stability	11.6	15.2 **
globality	9.4	13.3 *

NB * significant at $p < .01$

** significant at $p < .001$

Table 7 shows the abstinence oriented behaviours expressed by the subjects, and their feelings from the first break, which show them experiencing life in a good and positive way.

Table 7 Abstinence

Going to meetings, Working, Feeling good about self, Positive, Wanting to be well.

Bring marriage back on right foundation, No drugs.

Positive thinking and believing in one day at a time, after treatment.

Always wanted to be healthy, Get life sorted out, Lost control over life.

Commitment made for a drug free future.

Desire to change old behaviours, Sick of feeling bad, Fear, guilt, results from lifes negative experiences.

Motivated, come to know themselves, straight, Recognised underlying reasons for drug use, worked on them.

Wanted to stay of drugs, doing meetings.

Believed I could keep straight by myself.

Table 8 gives some examples of the types of behaviours and feelings associated with the high risk situation.

Table 8 High Risk Situations (Break Two)

Bored (2), Lacking excitment/interest, Arguing, Angry, Hurt, Bad relationship with partner, Marriage breakdown, Felt like they had been used and kicked in the head, Blead poppies and made tastes for people, Another woman came on the scene, Punish myself and boyfriend by using, Believed could cope with reintegrating with society all alone, Loneliness (2), Frustrated with others, no jobs, Fear, guilt, No confidence,, Feelings of inadequacy, Low self esteem, Unsure of who/waht they are, Wanted to be part of the crowd, one of them again, Security - returning to old patterns, testing self in situations (2), Feeling ---confident, thought could use, Depressed, Wanting to die.

Table 9 gives the feelings expressed at the lapse stage by the subjects.

Table 9 Lapse (Break Three).

Wanted to get out of it, Stuff it, Stuff the relationship partner, Angry, In or out, Fuck it - back into it again. Friends wanted me to give them money, Didn't care, Easy to start with friends around, feeling low, Peer pressure(2), Wanted to be part of the group, See what it was like, Friends excited about drugs, Bit drunk, Decided to go with the relapse, the inevitable, Wanted to spend time with old using people, Sick of system, Tried their best, Lonely(2), Bored, Thought I'd failed, Guilt, Wanted to use once to see if they were missing out, Decided to use and enjoy it.

Table 10, the last stage, relapse, shows a mixture of emotions and external influences i.e. a disease.

Table 10 Relapse (Break Four)

Relationship problems, Depression, bitterness, Lonely, Addiction is active, Addiction has taken over, After first couple - back into it, Need of addiction, life, Feeling I couldn't stop, Pain/physical, Using daily, An escape, Exciting, A thrill, Back into scene, F.T.W., This is living, Peer group pressure, No self esteem, Guilt, Shame

Chapter Eight : Discussion

The first question that has been answered is that the Abstinence Violation Effect (AVE) does exist, at least in this sample population of chemical misusers, and when it is deferred in the manner chosen. This means that support for the existence of the AVE has been found, along with support for its existence in the drug using community. This is in direct opposition to Birke, Edelman, and Davis, (1990) who suggested that the AVE did not exist in chemical misusers. It must be remembered that they were not using as sophisticated a measuring technique, and they were measuring attributional style of the person rather than the AVE directly. What has been found in these results is that the chemical misuser can expect to experience a predictable set of emotions and attributions when they lapse and subsequently relapse. The subjects showed increased negative affect over three of the four stages, with a high positive and low negative affect in the first stage. This indicates that at stage one the subjects are experiencing the world in a positive way, feeling good about themselves and others, only to change when entering into the high risk situation (HRS), stage two, to experiencing low positive and high negative affect. This in effect means that the person has changed from seeing the world as good and positive to one of viewing the world and themselves in a negative way - "The world sucks", "I feel stink".

Having such a high number of subjects experiencing the AVE in the HRS stage, the lapse stage and the relapse stage was both positive and at the same time worrying. On the positive side it showed good support for the AVE and also good support for the AVE in chemical misusers, however having twelve out of twelve subjects experienced the AVE at the HRS stage appeared to good to be true . Why did so many subjects experience an AVE when there

was no actual drug used? I started to look for an answer in terms of the definition that I used to decide whether an AVE had occurred.

An AVE was said to have occurred if the subjects showed a high attribution score, a high negative affect score and a low positive affect score (AVE 1). This score had to be higher and lower than the mean scores displayed for the group as a whole in the abstinence (Break 1) stage of the drug using cycle. An AVE was also considered to have occurred if the subject displayed high attribution, high negative affect and no shift in the positive affect (AVE 2). Finally an AVE was considered to have occurred if the subject showed high negative affect alone (AVE 3). This last definition is the reason why there was such a high number of subjects showing an AVE in the HRS stage, and in the other two stages also, with eleven out of twelve subjects experiencing an AVE at the lapse phase and ten out of the twelve subjects showing an AVE at the relapse stage. The subject is going to be experiencing high negative affect in the HRS stage as they will be feeling pressure from being in a position where they may lose their sobriety. To say that an AVE has occurred based on high negative affect alone is wrong, I believe, as Haaga (1989) and Curry (1987) point out, it is necessary to measure both emotions and attributional dimensions to get an accurate AVE measure.

A major problem with having an AVE in the HRS phase is the lack of a chemical. For an AVE to have occurred the person has to break the abstinence rule that they will not use drugs. It is only after using the drugs that an AVE is supposed to occur. This raises some serious issues, as the person has definitely experienced some emotions in the HRS, and they may be similar in make-up of an AVE, but technically it cannot be an AVE as no drug was used. One answer that may help is that this AVE formulation has been based around sex offenders, and for them they consider a lapse has occurred if they fantasise etc, but no physical sex with a child happens. When an offender has sex with a child, a relapse is said to occur (Ward 1992). The

answer to why the addict gets such a high number of AVE's in the HRS stage is because this stage is similar to the lapse phase of the child molester. Here the addict is often placed in a situation where they see others performing the forbidden behaviour (Table 8), they may have thoughts and fantasies about using, which is similar to the sex offenders behaviour. It is no wonder that they experience an AVE, just as the sex offenders do, as they are performing drug using behaviour, but not actually using the drug.

Although having included the high negative affect aspect as an AVE definition may have been inaccurate, it still does not detract from the importance that having such a high negative affect indicates. It would appear from these results that having a high negative affect leads a person back into using chemicals, at least to the lapse stage. The high negative affect was the main reason for such a high number of AVE's in both the HRS stage and the lapse phase of the drug- using cycle. Having a high negative affect, associated with even moderate attribution scores would still seem to indicate the return to using and relapsing. This may be an important result for those people working in the addictions field, enabling them to intercept a client who is showing high negative affect. The clinician will be better prepared for their client if they realise that there is a high probability that their client may return to using as a result of being in a high negative affect state. The clinician may redirect the client through making them aware of their predicament, and instigate some alternative therapy that may help their client refrain from indulging in drugs.

Another interesting feature that has been discovered with having the AVE in the HRS stage is the postulation that this may mediate the transition from the HRS to the lapse (first use of substance). Experiencing an AVE at the HRS would indicate that the person feels like they are in conflict, that they have broken an abstinent rule, that is they feel that by being in a using

situation they are breaking part of their abstinence rule. In some cases they may feel like they have used after having watched another person use drugs. Often the person is indicating that they have had enough of the straight , sober life and they would like to have a change, albeit a small change. They do not want to get back into their old addictive ways, and they feel that they would never go back to hard out using, but they "want to have their cake and eat it to". By this I mean that they want to be able to use recreationally and not get out of control. This way of thinking may make the decline into drug use easier , as they are convincing themselves that they can do it. So the resulting lapse should not be considered unexpected, as they have already been desensitized to breaking the abstinence rule, for example, being in a situation that they consider paramount to using, for example at a using house, in the HRS. It is as if the drug-using process in the mind has started to be activated, and the first stage is getting to a place or source where the substance required may be. After a period of incubation, as a result of the HRS, the next time they find themselves in this position they will be more inclined to use, as this is the next stage in the progression of using drugs. In a way it is similar to the process of desensitization postulated by Joseph Wolpe (Masters,Burish,Hollon, and Rimu 1987), the more a person is exposed to a situation the more they become desensitized ot any rules that restrict that particular behaviour.

Getting the subjects experiencing the AVE at the lapse stage was as expected, as this was the first time they had actually consumed a chemical, ineffect breaking their abstinence oriented programme. Having such a high number of people exhibiting the AVE here is not surprising, especially in light of what has already been explained. The age of this group of people may begin to play an important role in how they view their chemical misuse and their lifestyle in general. Their ages ranged from twenty five to forty-one years old, with the mean age being thirty-two years. They had all had a wide

range of life experiences, with most of them having been through a recovery programme (more on this point later). The age of this group could lead them to be expressing more of a desire for a change in lifestyle. They are not getting any younger and the prospects of a happy, healthy, fruitful life get further away with everyday they continue to ruin their lives with chemicals. The desire to be in control of their lives, to be healthy and devoid of drug and money problems may be more prevalent with this group than one of a younger age. If this group had been made up of a population with a mean age of eighteen years old the results may have been significantly different. The younger person may be more inclined to see drug-using as a positive experience, a way to gain recognition, respect or comradeship. It is a way to get attention, the trouble with the law seen as a status trip, a way to be accepted into the group. To the young chemical misuser this lifestyle may have alot of positive affect associated to it, whereas once the person has been in the drug scene for a few years all that changes and the reality of taking drugs reveals its horrible head. The having to get drugs to feel even normal, all the hassles of scoring, using, getting more, plus the money problems all add up to a very confused, sick, disillusioned individual running around and going nowhere, except down into the pits of despear and hopelessness. The addict becomes "sick and tired of being sick and tired" (N.A. Blue Book 1987) and starts to look for a way out of that type of existence. The person wants to be free from the addictive lifestyle, to live a clean productive life. There is a much stronger likelihood that a person in their thirties, who has experienced a drug problem, straightened up, and relapsed, is more likely to be angry, bored, helpless and feel shame and guilt as a result of lapsing than a youth of eighteen . The result would be an expected difference in the way a lapse may be viewed by my group of subjects when compared to a much younger group. This is not to say that all young people and all older people are

indicative of this statement, there will be individual differences depending on the persons experiences and stage in the drug using lifestyle. An older person who has just started taking chemicals may feel and act alot like a fifteen year old just kicking off with drugs, and then a nineteen year old may have taken enough drugs and seen enough problems to want to be free of all chemicals, and also experience an AVE.

Having a high number of individuals experiencing an AVE in the relapse stage was at first troublesome, as I found it difficult to comprehend how the subjects could experience the AVE in this stage. Then I was reminded of the saying " that once a person has been through treatment for drug addiction their using will never be the same again", and this is supported by the high incidence of AVE's here. The person, although using, is not happy doing so. They spend time getting the drug, then they use the drug, once stoned they vow and declear never to use drugs again, until they wake up the next day and start to think about getting stoned again, then they get stoned, wished they hadn't, vow and declear never to use again, until the next day, when it starts over again. And so this daily cycle repeats itself, and this is why I think it is correct that people do experience the AVE in relapse, for the very reasons just stated.

As I have already mentioned most of these people had been through a treatment programme or been in a twelve step programme (N.A., A.A.), which have a strong dependence on the disease model of addiction, with total abstinence seen as the only successful outcome. Herein lies the potential for these people to experience an AVE, at the HRS stage, the lapse and the relapse stage. Several of these people had been through the Queen Mary Hospital Drug and Alcohol treatment programme, which is an excellent example of the type of environment that people are placed in to overcome their problems with drugs.

Queen Mary Hospital isolates the addict from their using environment,

placing them in a caring, safe environment where they can express themselves openly, experience new feelings and emotions, and make plans for the future. One problem with this approach is to create an environment that is totally alien to the 'real world' that they have to return to. People who have been through this programme talk of finding themselves on a 'Hamner High", a pink cloud which creates the illusion that life's problems will be overcome 'no sweat', and that they will not be one of the eighty to ninety percent who will relapse within the first 6 months of leaving/completing a treatment programme (Miller and Heather, 1988). When the person comes down from their high, and they discover that the world doesn't do just what they want, that there are problems and pressures that have to be dealt with, they may experience a range of emotions or even Cognitive Deconstruction, and go looking for some relief from these pressures. The fact that the treatment programmes focus on abstinence as the only acceptable solution may increase the possibility that the person will feel guilt, anger, shame etc. as a result of lapsing, or even being in a HRS, than a person who has not been subject to a disease model treatment programme.

A significant difference was found between the genders, with the males showing more intense emotions than females. This was found with sadness, anger, contempt, hostility, fear, shyness and shame. Women on the other hand showed more joy than males, and slightly more interest than males, but overall they showed less emotion than the males. This would suggest that the males would show a more intense AVE than the females, which has been supported with the males showing more intense reactions on locus, stability and globality. This suggests that males put more emphasis on internal properties - ability, effort, mood, and patience, and see things as more stable, with helplessness occurring across situations. Through viewing their failures as more of a lack of effort than ability the males tend to elicit moral feelings,

ones that 'one ought to do'. These feelings are believed to be under greater volitional control than ability, which is associated with more intense affective reaction , for example, high negative - low positive affect. Ascription of failure to lack of effort generates reactions of guilt and shame, which in turn elicits reactions of perceived loss of control. As indicated these emotions featured more intensely in the males' results than did in the females', indicating that the males considered their failure was the result of internal, global and stable attributions, which I have shown.

The finding that males are more emotional than females when performing a drug-oriented behaviour does not support the null hypothesis postulated in this thesis. This may be an innate biological difference combined with a sociological influence that may be indicative of the way men have viewed women, with women being encouraged to be strong in an emotionally charged crises situation. Often men will go to women for support when they are feeling emotional, do the woman reciprocate? Obviously the differences between the genders will be open to considerable debate, by people involved in the social sciences around the world, so I do not purport to hold the key to the answer to this question. An explanation as to why this happened could be that males feel a need to be seen as able to succeed and overcome their problems, to be a success with their recovery, so when they fail they may feel this failure more intensely than the female. The feelings of anger, surprise, guilt, shame, and sadness may be felt more intensely as a result of their lapsing, or of them viewing themselves as failures. This is not to say that the female does not want to be straight. Females may be more realistic to the problems of drug addiction, and when they lapse they may be more accommodating to the problem, resulting in them not overreacting to their lapse. This would also mean that their AVE would be less severe, which is also supported in this thesis, with them exhibiting lower scores than the males on locus, globality and stability. Another remote possibility, but one

worth mentioning, is to do with the way the data was collected. This was a retrospective data collecting method, perhaps women view their past in a less emotional way than males. By this I mean that the males may put more emotion into their recollection of events than females. An interesting idea, and one that could do with some analysis itself.

Fear was the highest scoring emotion, which is interesting , as what is it fear of ? Is it fear of failure, fear of not succeeding, of not getting back into recovery, or is it fear of the drug and the consequences that goes with using mind altering chemicals ?

Hostility was the next emotion to stand out, as was guilt and anger. This is interesting as it is hypothesised that guilt (Hudson & Ward 1992) should lead the person back into recovery. Perhaps the combination of guilt and anger are a strong indicator that the person is going to experience a lapse followed by a relapse. Another possibility is that, for the addict, guilt may exacerbate the lapse into a relapse, or a HRS into a lapse, depending on when it is experienced by the person. If the person feels guilty, "I shouldn't have done that", but they make the attribution, "It's my disease and I'm an addict as a result" it makes it easier to move onto the next stage, i.e. from the HRS to a lapse, or it could occur after the lapse and lead into a relapse. Even more important is that if this is the case, that guilt and anger are strong indicators of lapse/relapse, then the clinician will be able to see the warning signs, and prepare the person to overcome this. If the person is complaining of feeling angry and guilty about people or situations in abstinence, then this will be a strong indicator that this person is heading for a HRS. It is in the early stages of building up to drugging (BUD) that these emotions will start to appear. The person needs to be made aware of this danger to themselves, and if the person is in treatment, or counselling, then the clinician should point out this stage to the person to prepare them in the future. An insurance plan can be

created by the person, with assistance from a psychologist if necessary, that in the event of them finding themselves in an angry mood with other emotions being involved, they should seek some form of safety that will not involve the risk of using. Here is where the Relapse Prevention programme comes into its own, by allowing the person an alternative to the rigidity of the disease model, and the associated treatment programmes.

The Composite Attribution scores changed little over the four breakpoints, which means that there was no significant difference found between the scores. This is similar to the results found by other investigators of the AVE, Ward (1992) found no significant difference in his research of the AVE in sex offenders, specifically child molesters involved in a treatment programme at Kia Marama. This may give support to the claim made by many recovering people, that while it is easy to stop taking drugs, the hardest part is to change your attitudes and feelings towards situations and/or people.

Limitations Of This Study

Collecting data retrospectively may have provided some problems, as having to rely on peoples memories for emotions and attributions for an event that happened in the past can often produce bias. Peoples memories are subject to alterations and distortions over time, especially when the event under observation is charged with emotion (Loftus, Miller and Burns 1978), as is the case with this study. People have been known to make up information when they are not to sure of exactly what has happened, even the way questions are asked of people can influence their recall of what really occurred (Meyers 1988). There is also the problem of subject bias, where the person wants to provide the experimenter with good data, by this I mean the subject wants to give the type of data that will give the experimenter good

results. The subject may also exaggerate the feelings that they had, or they may underestimate the intensity of the emotions that were generated in the situation that they have been asked to recall.

It could be argued that using the three AVE definitions has resulted in the covering of all the possible outcomes that the person may experience at the different stages of using. For drug addicts these definitions may be to broad, and more applicable to child molesters. At present there is no other work on the AVE in drug addicts, based on this reformulated definition of the AVE, so getting information on this effect is in the early stages of research. It is important to be broad in the collection of the data in the early stages of researching a concept (Ward 1992), to be sure that you are covering it adequately and getting a good picture of what it is you are looking for. The result of this type of collection is the ability to sift through the data and take out what you need and put aside what you do not want to use. It also allows the experimenter to narrow down their focus if need be, or to enlarge the data collection spectrum if desired.

The fact that there were using people and non using people in the sample population may have resulted in some motivational problems for the subjects. Those people who were still using drugs may have got frustrated with the length of the questionnaire, and found difficulty in keeping their attention focused on the task at hand. The people who were still using may not have had very good recollection of what had happened at the different stages in their drug relapse, so their data may have been flawed.

The subjects were asked to tick the answer that they thought best described the reasons they had written down, however this method is opened to the person becoming lazy with their answers as they get towards the end of the questionnaire, with them just ticking any old number just so they can finish.

Overall this thesis has been careful to allow for any bias or flaw that may

have occurred during the collection and analysis of the data, firstly by being careful during the collection of the data, and secondly through choosing appropriate statistical measuring techniques that could accurately interpret the data, making the results easy to analyse .

Suggestions for Future Research

Having such a high number of people showing an AVE type of experience in the HRS stage would suggest that there is a need to research exactly what it is that these subjects are experiencing here. It would appear that it is very similar to an AVE, however as no actual chemical had been used it could not be classed as an AVE. The AVE construct may have to be broadened to include the effects that the HRS sets of in people, or that the effect that is created by the HRS may have to be examined in detail and given its own name. Another possibility is that these people are experiencing an AVE. In Dr. Wards research, his subjects experienced an AVE even though they had not actually physically performed the restricted behaviour. His subjects were experiencing an AVE through fantasising about sexual behaviour with children. This may be similar to the addict who finds themselves having to get drugs for other people, or having to inject another person with narcotics, in effect they are performing all the drug using behaviours minus the actual usage of the substance themselves. Through behaving like this they may feel like they have come extremely close to using, even feeling like they have used. Often when behaving this way the individual starts to want the drug themselves, so it is no wonder that with all these feelings and attributions surfacing the person may end up having an AVE. There is definite scope here for further research, as this study has exposed a significant problem in the definition of the AVE as related to the HRS.

The size of the sample population that was used may have been adequate for the purpose of this study, but I would suggest that as there was a difference found between the genders , that future research may be conducted using only females in one study, and only males in the second study, then compare the results from both studies to see if the differences found in this research stand up to scientific inquiry.

Another area that could be studied is the differences in the age of the subjects, this groups mean age was 32, if it had been 19 the results may be significantly different. Perhaps the AVE only comes after a certain stage in the drug users life, for example the person may had to have reached a 'rock bottom' to install the desire to remain chemically free, just saying that they would like to stop taking drugs may not be enough to set of the AVE when they fail to stop. The person may have to really desire and want to be clean, and when they lapse it is only then that they actually experience the AVE. This is another area that may be investigated in the future.

This research could be carried out on other cultures to see if they experience the AVE, for example looking at the maori people, using both male and female groups, and comparing them to the results from studies carried out on european male and females.

To get a more accurate account of the emotions and attributions that people experience after they have made a commitment to abstinence from drugs a longitudinal study could be carried out on groups of people going through treatment programmes. Subjects could be followed up after completion of their treatment programme, at regular time intervals, measuring their emotions and attributions, and if they lapse they agree to contact the experimenter immediately so they can get a measure of what they are feeling and thinking. There will be problems with such a study, but if you have enough people who complete the experiment then you would have some very interesting and useful data.

With more research being carried out on the AVE the problem of the three definitions may be sorted out. There is a pressing need to get an accurate definition of the AVE as this is one of the persisting criticisms that is following the research on the AVE, that it has been based on a flawed AVE construct. As more information comes to light on the AVE, a more precise definition will emerge out of the data, which will enable researchers to correctly identify an AVE and allow for better treatment procedures for the patients who experience the abstinence violation effect.

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APPENDICES

Abstinence Violation Questionaire

Section 1.

Code Number:

Ethnicity:

Sex:

Age:

Current Relationship Status:

How long have you been that status:

Any children:

Any criminal convictions:

Are these drug related:

Psychiatric History:i.e. Drug treatment programmes.

Admission to hospital for other i.e. depression.

Do you have any physical problems.

Do you suffer from chronic pain.

Employment History:

a) Current status:

b) Past status:

c) Highest attainment at school.

d) Age left school:

e) Any further technical attainment:

How long have you been in Christchurch:

Section 2.

History of Drug Use.

a) When did you first use drugs (age, influences)

b) What type of drugs:

c) Frequency of usage. Was there a progression.

d)Favorite drug of choice. Has this changed over time.

e) Means of attaining drug.

f) What led to first period of abstinence:

g) Number of times you have had periods of abstinence:

h) Length of time you remained abstinent:

i) What caused you to use drugs again:
i) Stress

ii) Anxiety

iii) Anger

iv) Jealousy

v) Unemployment

vi) Depression

vii)Family / Relationship Crisis

viii)Around old influences (people, places)

ix) Thought you could handle one

x) Other

j) How did you attain the drug for the first usage after abstaining:

Section 3

Relapse Scenario

Please describe your most recent or most typical relapse. Suggested length of scenario is 2 or 3 handwritten A4 (fullscap) pages.
A guide to information to cover:
Descibe the background circumstances to your relapse, the situation you found yourself in. Had you been associating with old friends, thinking about using, associating with non using people, or were you bored, tired or upset?

Describe the steps you went through to attain and use the drug.

Did you find yourself entering high risk situations prior to using, and if so how long before you picked up and used?

Describe your first usage after your period of abstinence. Your feelings before using, what it felt like to take the drug, did you enjoy it or hate it, feel guilty or angry, and your feelings after using.
What happened inbetween the first time and the next usage. How long did you refrain from using drugs before you used again. What were your thoughts and feelings in this time, and your motivation level like.
How long before your returned to full usage, back to pre-abstinent levels of drug intake.
Did you associate with new drug people, old aquaintences, was the situation changed from the last time you were a full time user.

MODIFIED 4-ADS (Benson, 1989)

Name: _____ Date: _____

No: 1 2 3 4

This form helps us to understand more about peoples' reasons for drug use
This is not a test and there are no right or wrong answers.

1. What is the reason for your behaviour right now?

_____

_____

_____

Next, we would like to know what you think about the reasons you wrote down above.

1) Are the reasons you wrote down things that:

____ Will stay the same over time;
____ Can change only a little over time;
____ Can change a fair amount over time;
____ Can change a lot over time;
____ Will change a lot over time.

2) Are these reasons things that:

____ Don't have anything to do with you;
____ Have to do with you only a little;
____ Have to do with you a fair amount;
____ Have a lot to do with you;
____ Have everything to do with you.

3) Are these reasons that you:

____ Can completely control;
____ Have a lot of control over;
____ Have some control over;
____ Have only a little control over;
____ Cannot control at all.

4) Are the reasons you gave things that:

____ Would happen only in this special situation;
____ Would happen in a few similar situations;
____ Would happen in some similar situations;
____ Would happen in most similar situations;
____ Would happen in this kind of situation and in other situations.

5) Are these reasons things that are:

_____A lot about you;
_____A little about you;
_____About you and about the circumstance;
_____A little about the circumstance;
_____A lot about the circumstance.

6) Do you think the reason above would:

_____Never again be present;
_____Rarely be present again;
_____Sometimes be present again;
_____Usually be present again;
_____Always be present.

7) Are these reasons things that happen to you:

_____Very often in different situations;
_____Often in different situations;
_____Sometimes in different situations;
_____Rarely in different situations;
_____Very rarely in different situations.

8) Are these reasons for which:

_____You are not at all responsible;
_____You are only a very little bit responsible;
_____You are a little bit responsible;
_____You are mostly responsible;
_____You are completely responsible.

9) Do you think that these reasons:

____ Could change only a little bit from one year to the next;
____ Could change a little bit from one year to the next;
____ Could change somewhat from one year to the next;
____ Could change a lot from one year to the next;
____ Could change very, very much from one year to the next.

10) Are these reasons:

____ Most about others;
____ Partly about others;
____ Both something about you and about others;
____ Partly something about you;
____ Mostly something about you.

11) Are these reasons things that:

____ You can completely control;
____ You can control very much;
____ You can control a fair amount;
____ You can control only a little;
____ You cannot control at all.

12) Would these reasons be:

____ True for you only in this special event;
____ True for you in this event and in some other similar events;
____ True for you in most similar events;
____ True for you in most areas of your life;
_____ True for you in all areas of your life.

13) Are these reasons things that are:

_____ Completely inside you;
_____ Mostly inside you;
_____ A little inside and a little outside of you;
_____ Most outside of you;
_____ Completely outside of you.

14) Are these reasons things that:

_____ Will probably change whole lot during a year;
_____ Might change a lot during a year;
_____ Might change quite a bit during a year;
_____ Rarely change even a little during a year;
_____ Never change within a year.

15) Are these reasons true for you:

_____ In most similar circumstances;
_____ In many similar circumstances;
_____ In some similar circumstances;
_____ Only in this type of circumstance;
_____ Only on this particular circumstance.

16) Are the reasons things for which:

_____ You are responsible;
_____ You are only a very little bit responsible;
_____ You are a little bit responsible;
_____ You are partly responsible;
_____ You are very responsible.

Name:_____ Date:_____

No: 1 2 3 4

This scale consists of 36 phrases which describe different emotions. Please indicate the extent to which each phrase describes the way you feel at the present time. Record your answers by circling the appropriate number on the five-place scale following each word. Presented below is the scale for indicating the degree to which each word describes the way you feel.

very slightly or not at all	slightly	moderately	considerably	very strongly
1	2	3	4	5

In deciding your answer to a given item, consider the emotion connoted or defined by that word. then, if at the present moment you feel that way very slightly or not at all, you would circle the number 1 on the scale; if you feel that way to a moderate degree, you would circle 3; if you feel that way very strongly, you would circle 5, and so forth.

Remember, you are requested to make your responses on the basis of the way you feel at this time. Work at a good pace. It is not necessary to ponder; the first answer you decide on for a given word is probably the most valid.

		very slightly or not at all	slightly	moderately	considerably	very strongly
1)	Feel regret, sorry about something you did	1	2	3	4	5
2)	Feel sheepish, like you do not want to be seen	1	2	3	4	5
3)	Feel glad about something	1	2	3	4	5
4)	Feel like something stinks, puts a bad taste in your mouth	1	2	3	4	5
5)	Feel you can't stand yourself	1	2	3	4	5
6)	Feel embarrassed when anybody sees you make a mistake	1	2	3	4	5
7)	Feel unhappy, blue, downhearted	1	2	3	4	5

		very slightly or not at all	slightly	moderately	considerably	very strongly
8)	Feel surprised, like when something suddenly happens you had not idea would happen	1	2	3	4	5
9)	Feel like somebody is a low-life, not worth the time of day	1	2	3	4	5
10)	Feel shy, like you want to hide	1	2	3	4	5
11)	Feel like what you're doing or watching is interesting	1	2	3	4	5
12)	Feel scared, uneasy, like something might harm you	1	2	3	4	5
13)	Feel mad at somebody	1	2	3	4	5
14)	Feel mad at yourself	1	2	3	4	5
15)	Feel happy	1	2	3	4	5
16)	Feel like somebody is a "good-for-nothing"	1	2	3	4	5
17)	Feel so interested in what you're doing that you're caught up in it	1	2	3	4	5
18)	Feel amazed, like you can't believe what's happened, it was so unusual	1	2	3	4	5

		very slightly or not at all	slightly	moderately	considerably	very strongly
19)	Feel fearful, like you're in danger, very tense	1	2	3	4	5
20)	Feel like screaming at somebody or banging on something	1	2	3	4	5
21)	Feel sad and gloomy, almost like crying	1	2	3	4	5
22)	Feel like you did something wrong	1	2	3	4	5
23)	Feel bashful, embarrassed	1	2	3	4	5
24)	Feel disgusted, like something is sickening	1	2	3	4	5
25)	Feel joyful, like everything is going your way	1	2	3	4	5
26)	Feel like people laugh at you	1	2	3	4	5
27)	Feel like things are so rotten they could make you sick	1	2	3	4	5
28)	Feel sick about yourself	1	2	3	4	5
29)	Feel like you are better than somebody	1	2	3	4	5
30)	Feel like you ought to be blamed for something	1	2	3	4	5

		very slightly or not at all	slightly	moderately	considerably	very strongly
31)	Feel the way you do when something unexpected happens	1	2	3	4	5
32)	Feel alert, curious, kind of excited about something	1	2	3	4	5
33)	Feel angry, irritated, annoyed with somebody	1	2	3	4	5
34)	Feel discouraged, like you can't make it, nothing's going right	1	2	3	4	5
35)	Feel afraid	1	2	3	4	5
36)	Feel like people always look at you when anything goes wrong	1	2	3	4	5

UNIVERSITY OF CANTERBURY DEPARTMENT OF PSYCHOLOGY

CONSENT FORM

Reason for the project: The reason for this project is to look at the relapse process, in particular the effect of violating my Abstinence rule (taking that first drug after a period of "clean" time)

Your tasks in this project: I want you to describe your last relapse, or what normally occurs when you go into a lapse/relapse situation, on to a tape. You will then listen to your description and fill in some questionnaires at 4 points

Risks associated with participation: None

Confidentiality: You will be assigned a number, but no names will be recorded, nor will a record be kept of the tape, it will be wiped

Voluntary participation: Your participation in this research is voluntary and you may withdraw at any time

Time required: Up to 1½ hours to develop the audio tape and about an hour to fill in the questionnaires while listening to the tape

Name of researcher/supervisor: Grant Foster / Dr Steve Hudson

I agree to participate in the project described above, on the understanding that if at any time I wish to withdraw from the experiment I may, without prejudice, do so. All information collected will be confidential as will the identity of participants.

Name: .....

Signature ..... Date .....